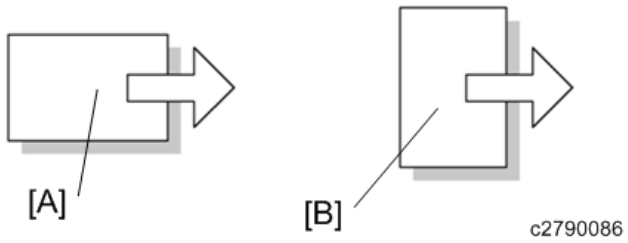
Vacuum Feed LCIT RT5120
Machine Code: D3EW
Field Service Manual
Ver 1.0

Latest Release: Feb, 2018
Initial Release: Feb, 2018

Symbols, Abbreviations

This manual uses several symbols and abbreviations. The meaning of those symbols and abbreviations are as follows:

Symbol	What it means
	Clip ring
	Screw
	Connector
	Clamp
	E-ring
	Flat Flexible Cable
	Timing Belt
SEF	Short Edge Feed
LEF	Long Edge Feed
K	Black
C	Cyan
M	Magenta
Y	Yellow
B/W, BW	Black and White
FC	Full color



[A] Short Edge Feed (SEF)

[B] Long Edge Feed (LEF)

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1. Replacement and Adjustment

Note

Do not pull out all the trays while RT5120 is not docked to the main machine. Or the unit may topple.

Exterior Covers

Right Upper Cover

1. Open paper tray 1 slightly.
2. Remove the right upper cover [A](x4)

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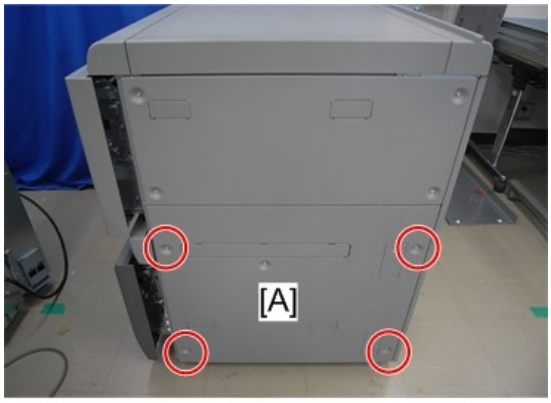
Right Lower Cover

1. Open paper trays 1 and 2 slightly.
2. Remove the right lower cover [A] (x5)



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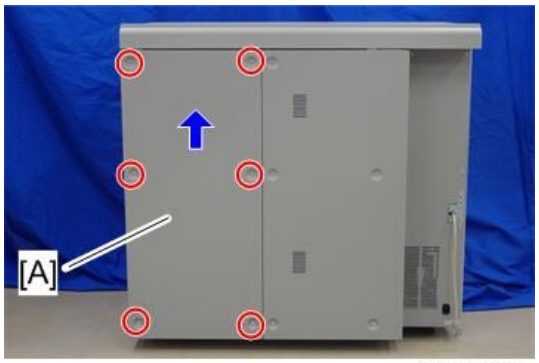
Rear Right Cover

1. Lift the rear right cover [A] slightly and remove it (x6).



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Note

- When attaching the rear right cover, hang it on the hook.

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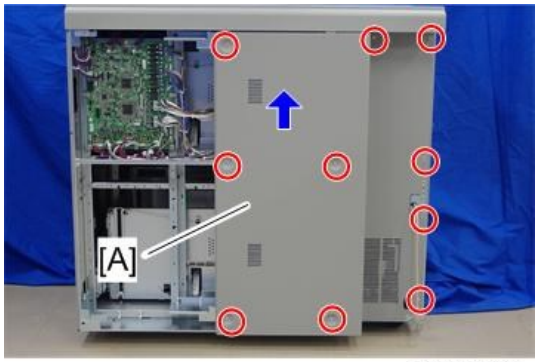
Rear Left Cover

1. Remove the rear right cover (Rear Right Cover)
2. Lift the rear left cover [A] slightly and remove it (x10).



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Note

- When attaching the rear left cover, hang it on the hook.

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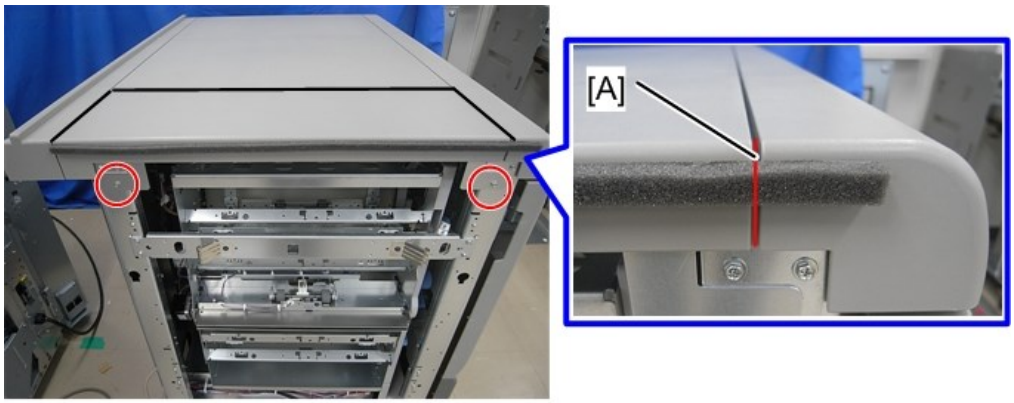
Left Top Cover

1. Cut the cushion at the position [A] along the groove.
2. Remove the screws on the left top cover (x2).



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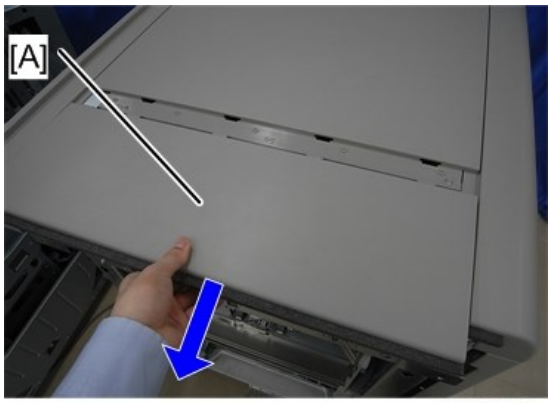
3. Slide the left top cover [A] in the direction of the blue arrow and remove it.



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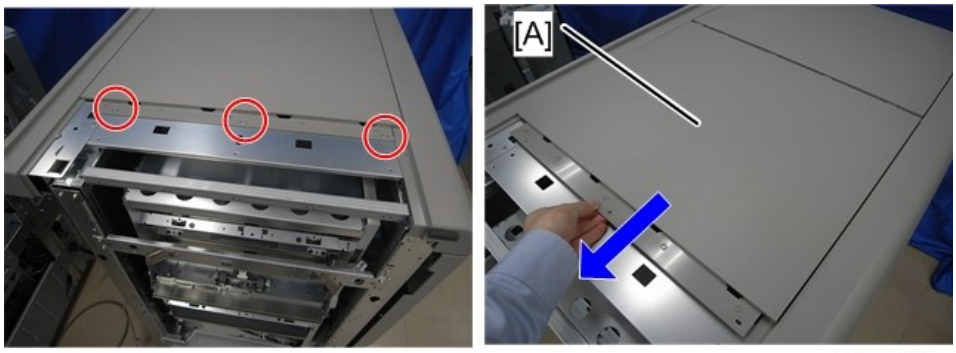
Center Top Cover

1. Remove the left top cover (Left Top Cover)

2. Slide the center top cover [A] in the direction of the blue arrow and remove it (x3).



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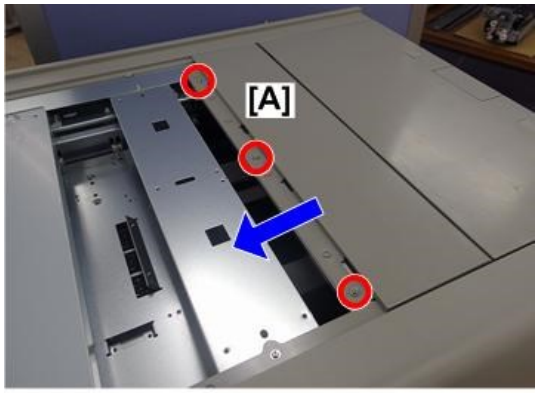
Right Top Cover

1. Remove the left top cover (Left Top Cover)
2. Remove the center top cover (Center Top Cover)
3. Remove the screws to slide the right top cover [A] in the direction of the arrow and remove it.



x3

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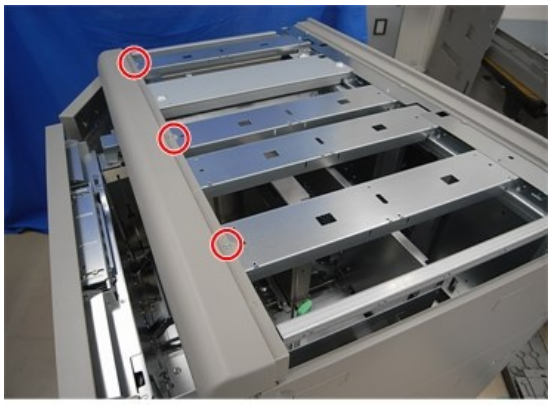
Front Corner Cover

1. Remove the left top cover (Left Top Cover)
2. Remove the center top cover (Center Top Cover)
3. Remove the right top cover (Right Top Cover)
4. Remove the screws at the top of the front corner cover (x3).



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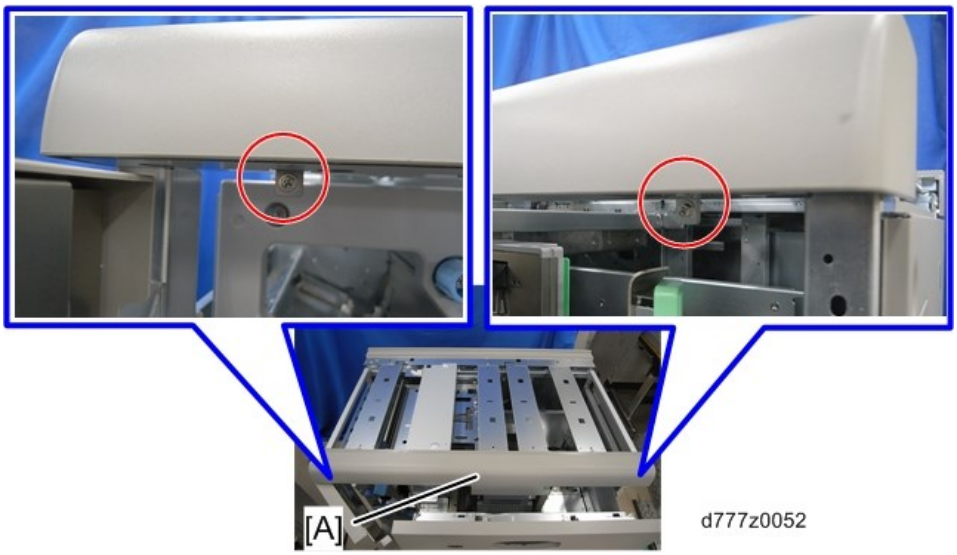
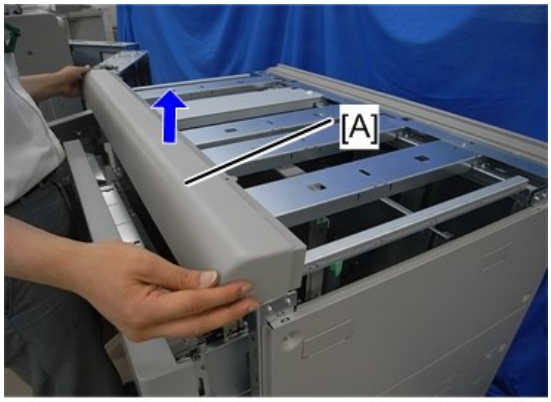
5. Remove the screws at the bottom of the front corner cover [A] (x2).



6. Lift the front corner cover [A] and remove it.



Top Cover

1. Remove the right top cover (Right Top Cover)

2. Remove the screws on the stay [A], and then remove the stay with the top cover.

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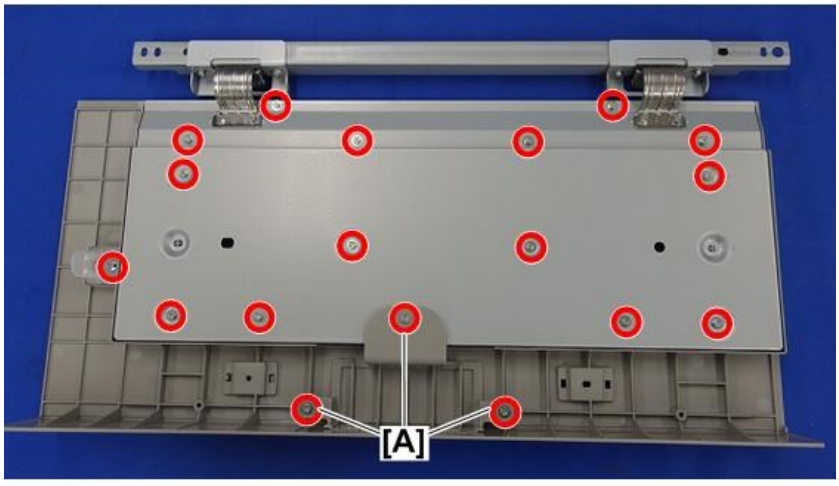
3. Remove the plate from the top cover.



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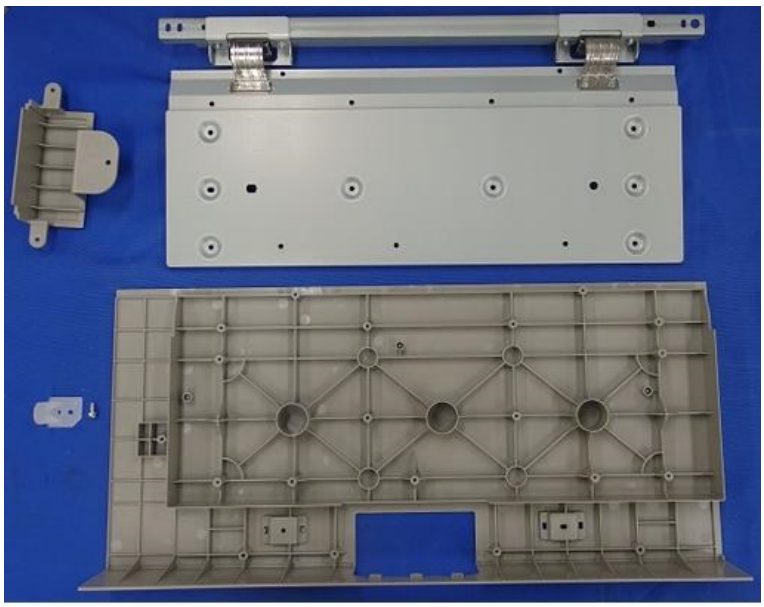

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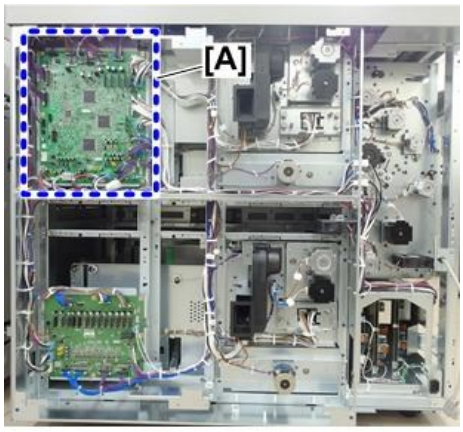
Top Cover Interlock Switch

1. Remove the rear left cover. (Rear Left Cover)
2. Open the clamps on the left side of the main board to loosen the white/black harness [A], which runs to the interlock switch.

Note

Main board location [A]



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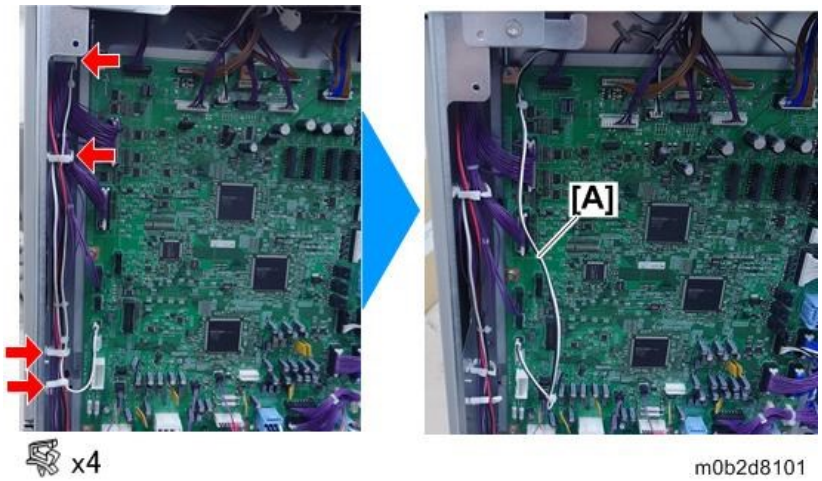
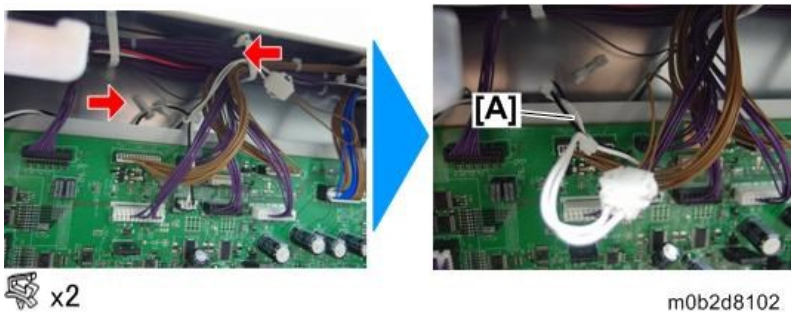


3. Loosen the white/black harness [A] on the upper side of the board.



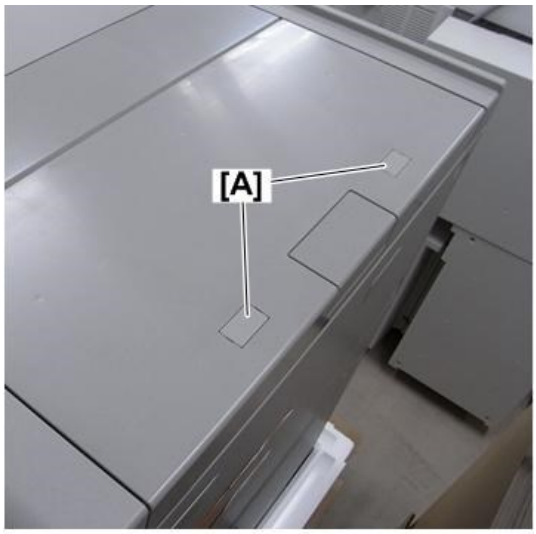
Note

By loosening the harnesses, you can pull out the bracket of the interlock switch more in the later step, leading to facilitating the removal of the switches.

4. Remove the caps [A].

Note

If Vacuum Feed Banner Sheet Tray Type S9 is installed, skip this step.



5. Remove the screws on the top cover.

Note

If Vacuum Feed Banner Sheet Tray Type S9 is installed, skip this step.

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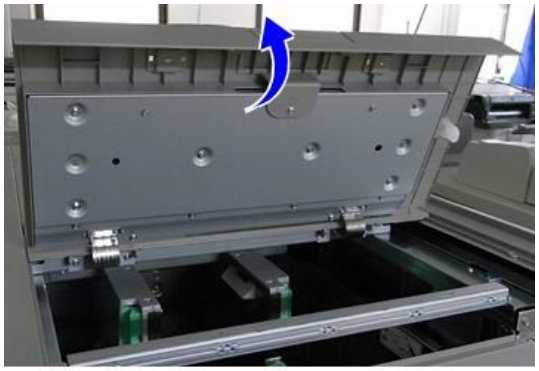
6. Open the top cover.



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7. Pull tray 1 out.

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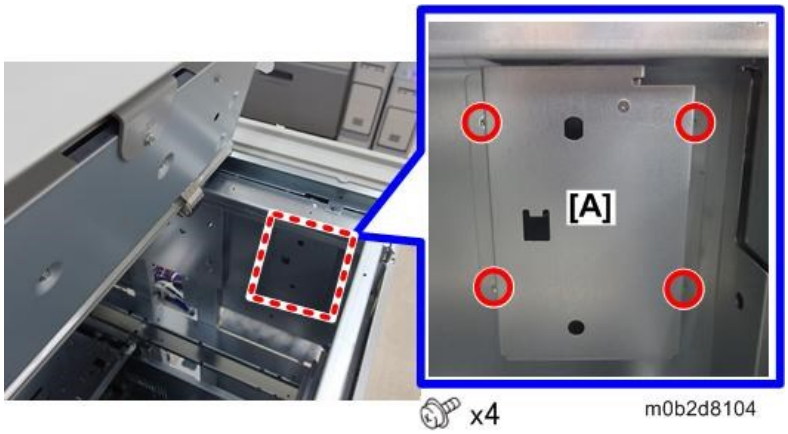
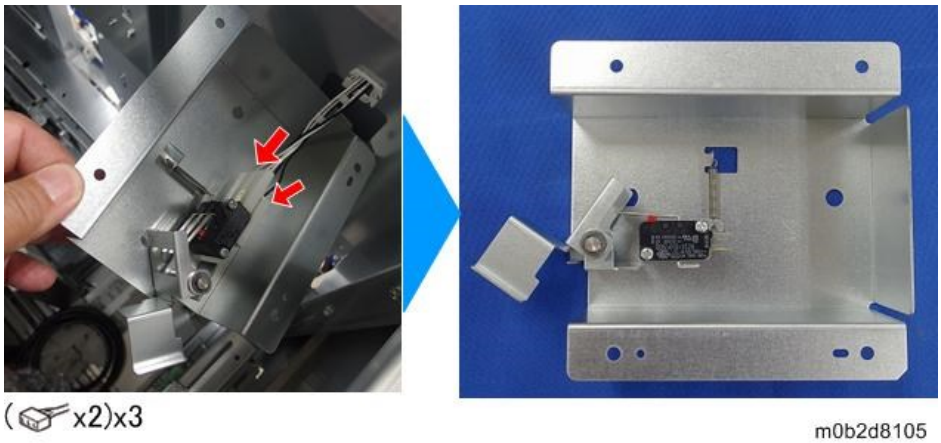
8. Remove the screws on the interlock switch bracket [A].

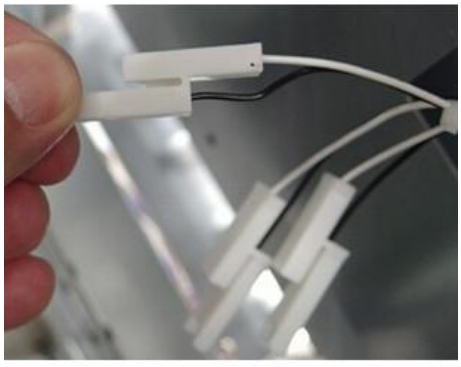


9. Pull the bracket slight to access the backside of it. Then, disconnect the connectors of the switches to remove the bracket.



Note

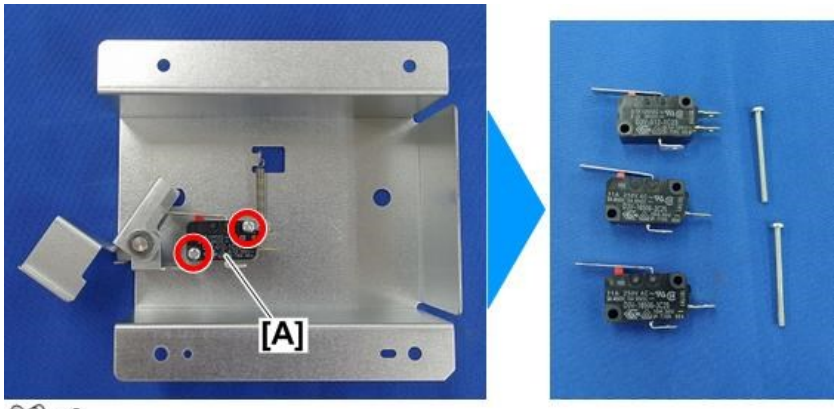
Each of white and black harness connectors is fixed as a pair. This prevents wrong-pair connection.



10. Remove the screws on the switches [A] to detach them.

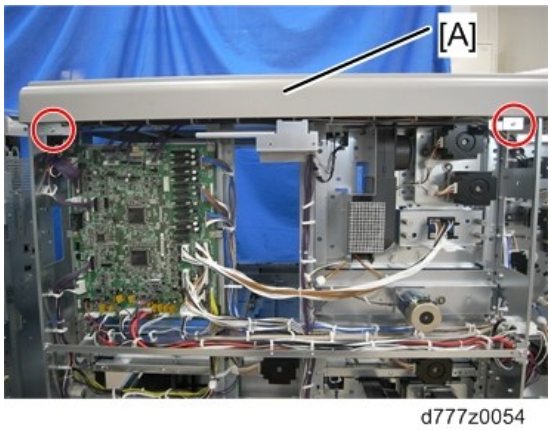
Note

The three switches are installed adjoiningly and secured with the same screws.



Rear Corner Cover

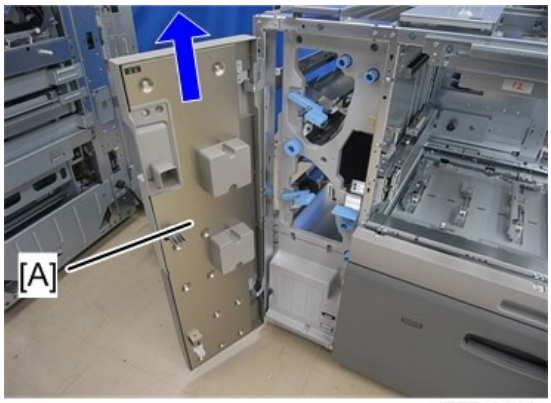
1. Remove the left top cover (Left Top Cover)
2. Remove the center top cover (Center Top Cover)
3. Remove the right top cover (Right Top Cover)
4. Remove the rear right and rear left covers (Rear Right Cover,Rear Left Cover).
5. Remove the rear corner cover [A](x2)



Front Door

1. Remove the left top cover (Left Top Cover)
2. Remove the center top cover (Center Top Cover)
3. Remove the right top cover (Right Top Cover)
4. Remove the front corner cover (Front Corner Cover)

5. Lift the front door [A] and remove it.



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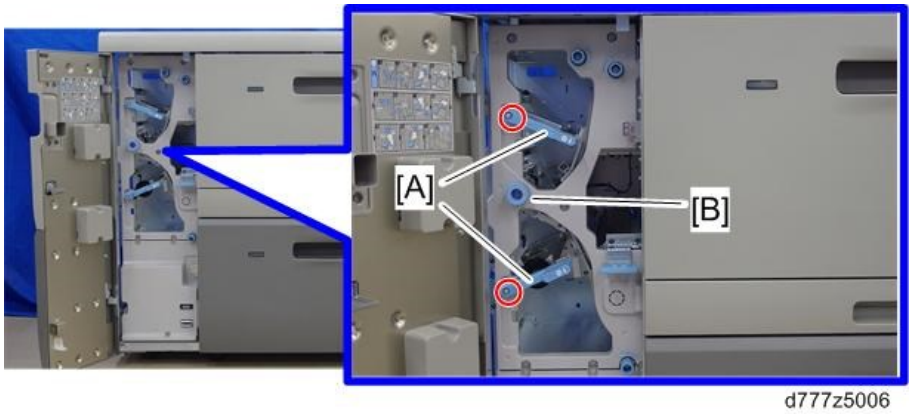
Upper Inner Cover

1. Open the front door.
2. Remove the two levers [A] (x1 each).
3. Remove the knob [B] (x1)



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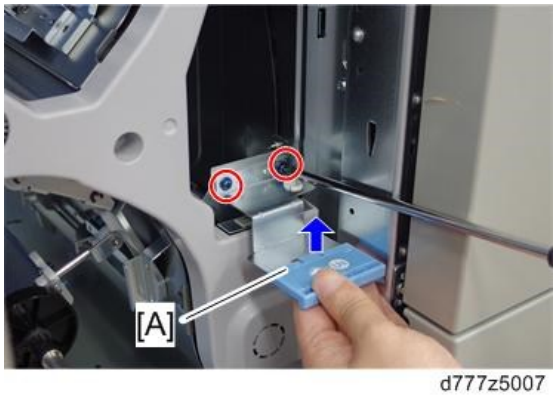
4. Raise the paper jam U9 clearing plate and remove the knob [A] (x2).



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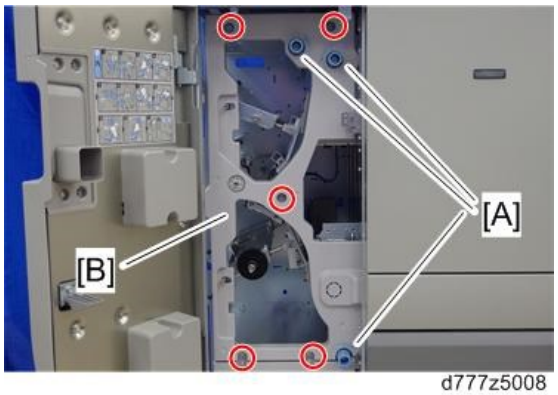
5. Remove the three knobs [A] (x1 each)

6. Remove the upper inner cover [B] (x5)



Lower Inner Cover

1. Open the front door.

2. Remove the lower inner cover [A] (x3)

Tray Front Cover (Tray 1, 2)

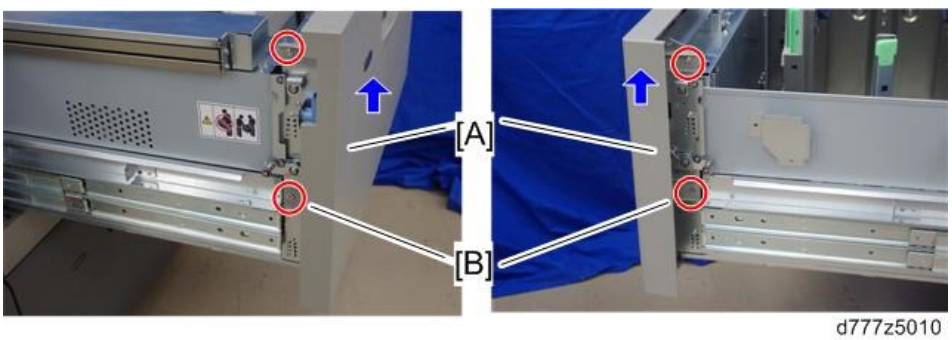
Note

- The replacement procedures for the tray front covers of tray 1 and 2 are the same. The following is the procedure for replacing the tray front cover of tray 1.

1. Pull out the paper tray.

2. Lift the tray front cover [A] and remove it (x4).

- The lower screw [B] is a shoulder screw.



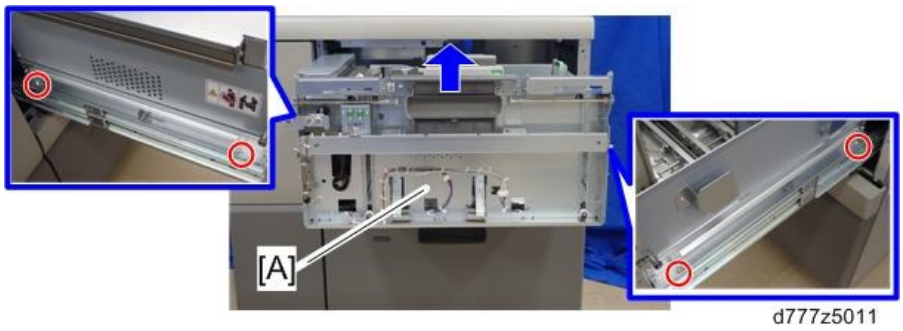
Paper Feed Unit (Trays 1, 2)

Note

- Parts in paper trays 1 and 2 can be removed using the same procedure. The following are the procedures for replacing the parts in tray 1.

Paper Tray

1. Remove the tray front cover (Tray Front Cover (Tray 1, 2))
2. Remove the paper tray [A] (x4)



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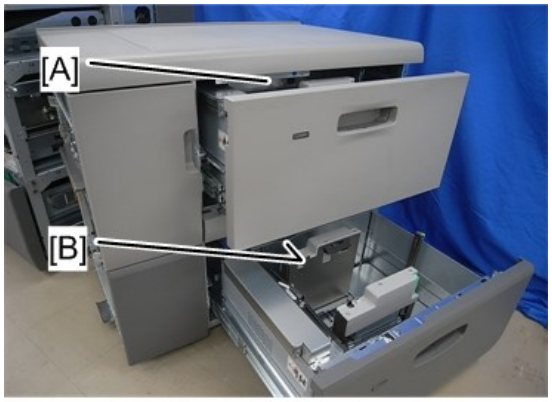
Important

- The tray weighs about 30 kg. It is heavy and requires careful handling by two persons.

Paper Feed Belt Unit

[A]: Tray 1 paper feed belt unit

[B]: Tray 2 paper feed belt unit



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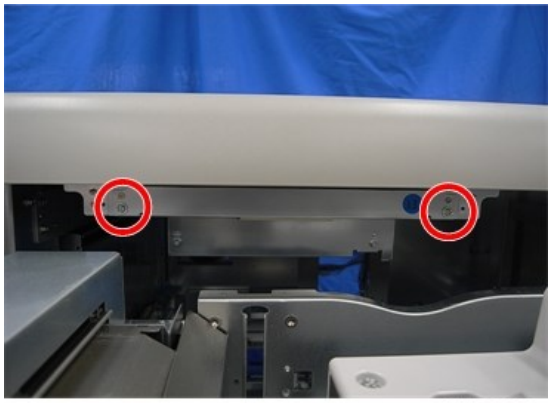
1. Open the paper tray.

2. Remove the lock of the paper feed belt unit (x2).



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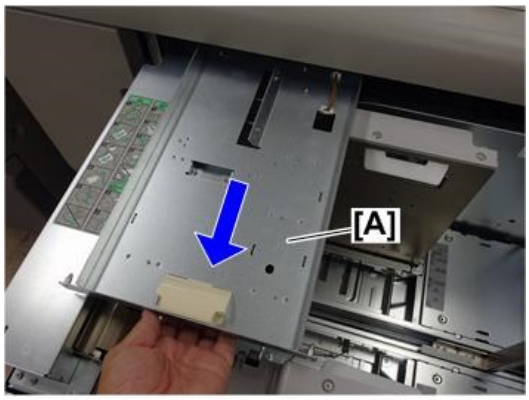
3. Hold the knob of the paper feed belt unit [A] and pull out the paper feed belt unit [A].



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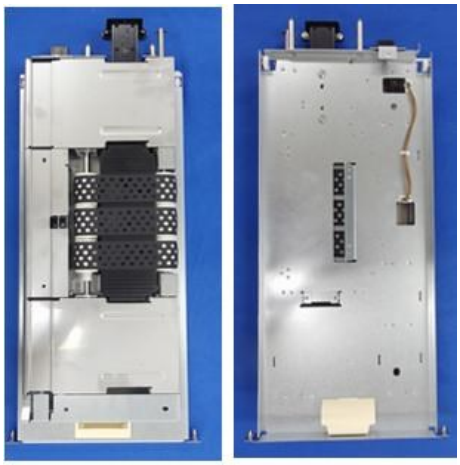

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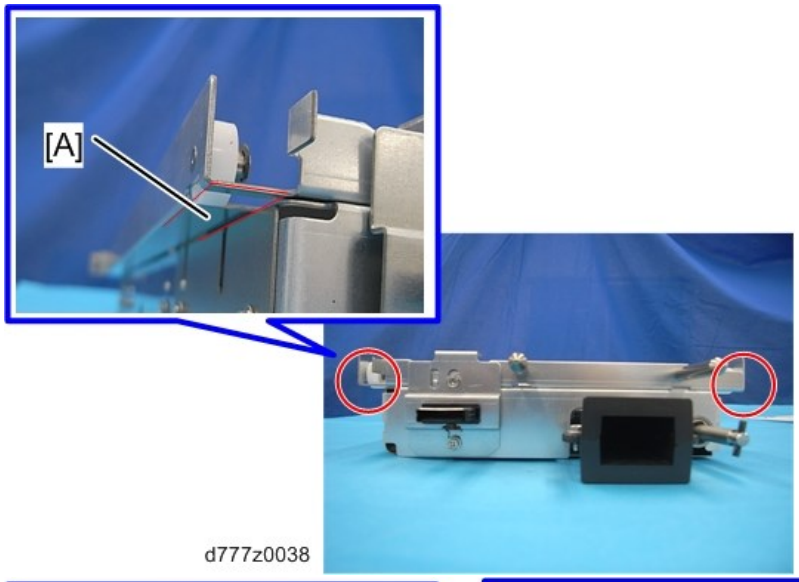
Note

- The paper feed belt unit must be pulled out horizontally relative to the paper tray, to ensure that the paper feed belt is not damaged by getting caught in the side fences or other parts.
- To prevent damaging the paper feed belt when you return the paper feed belt unit to its original position, align the right and left guides [A] with the rails [B] on the paper tray side and raise them slightly before replacing the unit.



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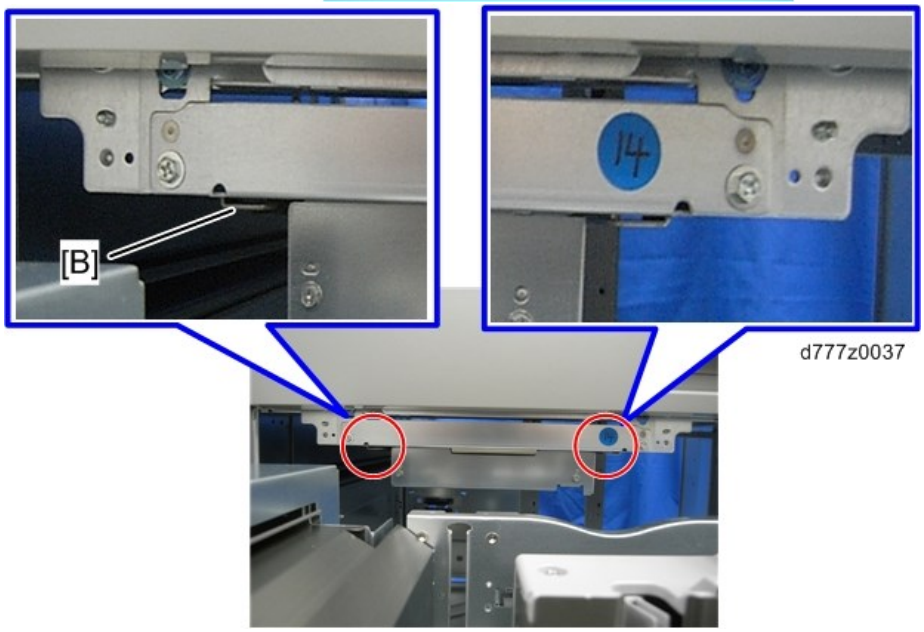

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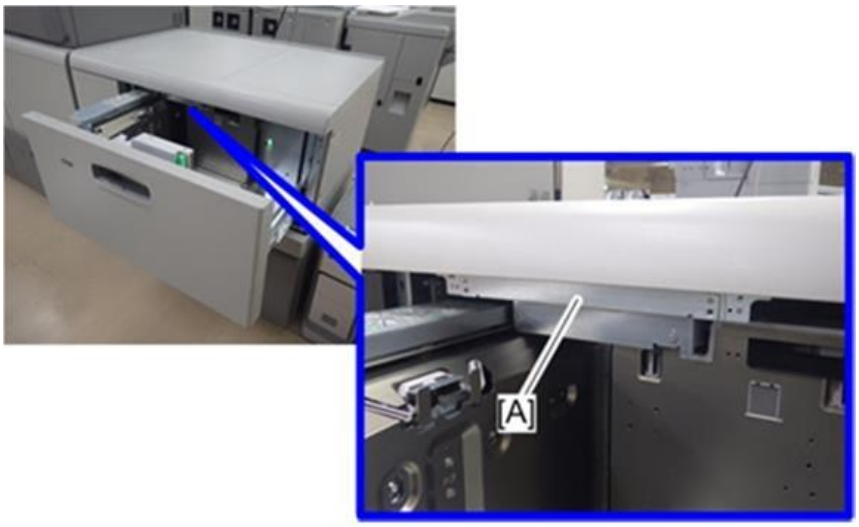
Installing the paper feed belt unit

1. Attach the paper feed belt unit [A].



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2. Check that there is no gap at the position indicated by the red dotted circle. Then, secure the paper feed belt unit firmly with two screws.

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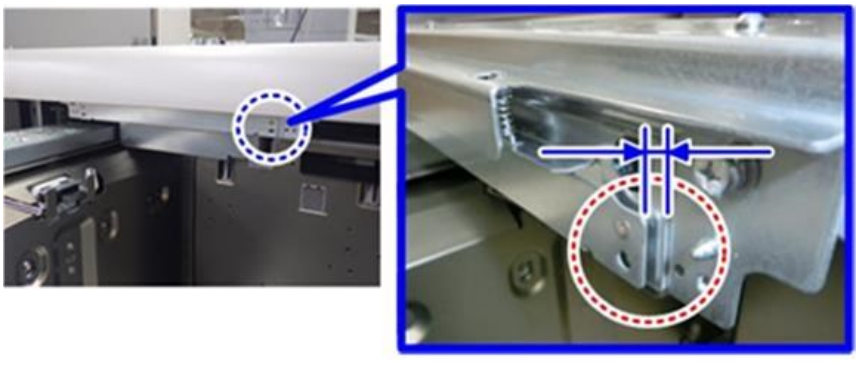
If there is a gap, proceed to the following step.



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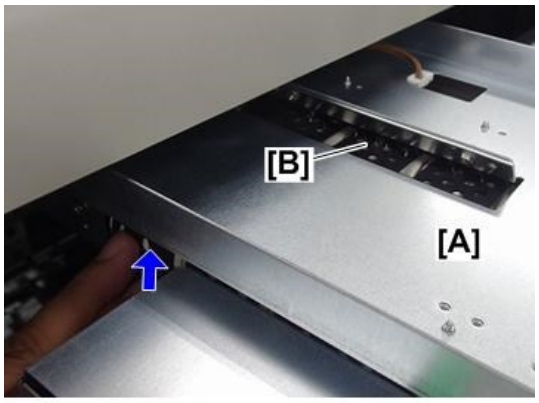
3. If there is a gap, pull out the paper feed belt unit [A], rotate the paper feed belt [B] upwards to change the position of the rear spring pin and coupling position slightly and then set the paper feed belt unit again. Repeat it until the paper feed belt unit is tightly attached and there are no gaps between the frames.



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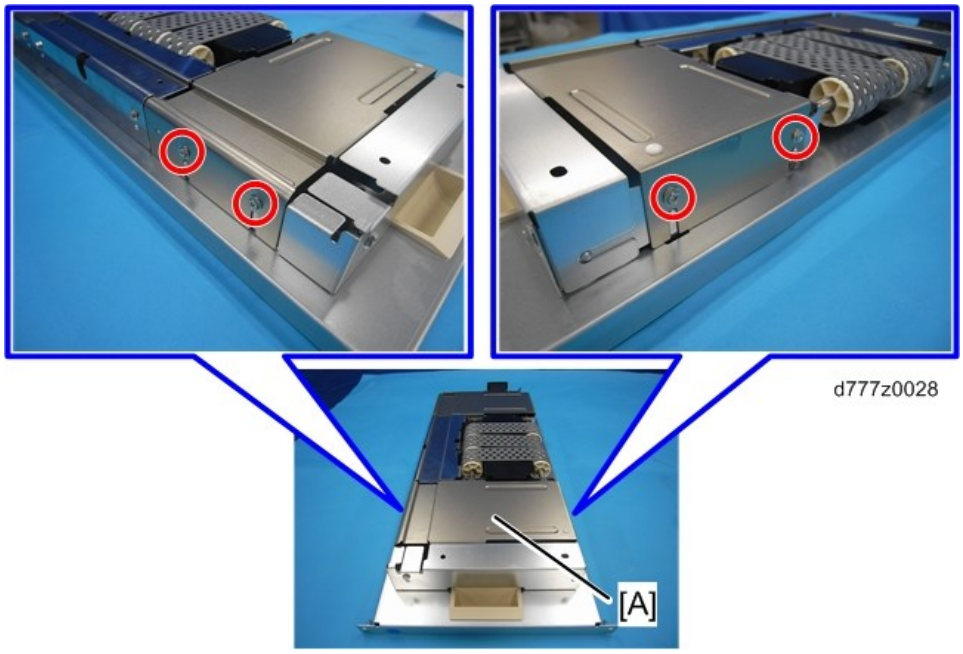
Paper Feed Belt

1. Remove the paper feed belt unit (Paper Feed Belt Unit).
2. Remove the guide plate [A] (x4)



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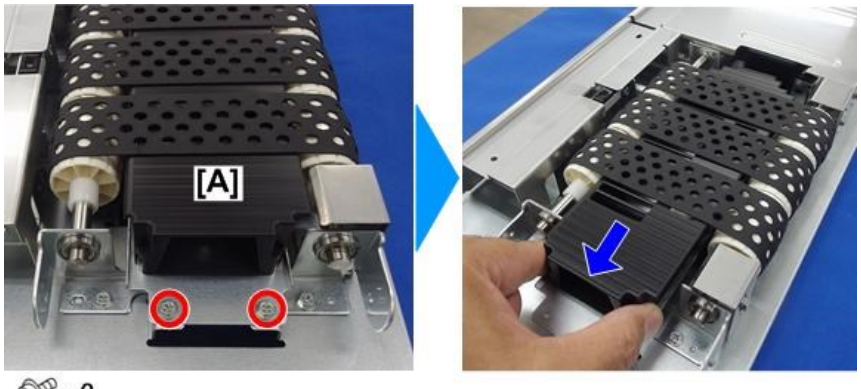
3. Remove the screws and pull out the chamber [A].



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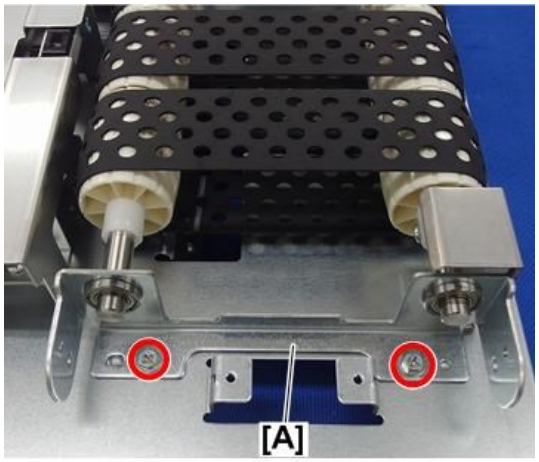
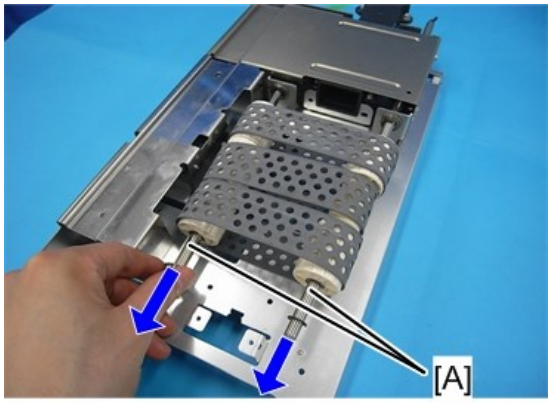
4. Remove the bracket [A].



x2 m0b2d8007

m0b2d8008

5. Remove the belt shaft [A] and the paper feed belt.



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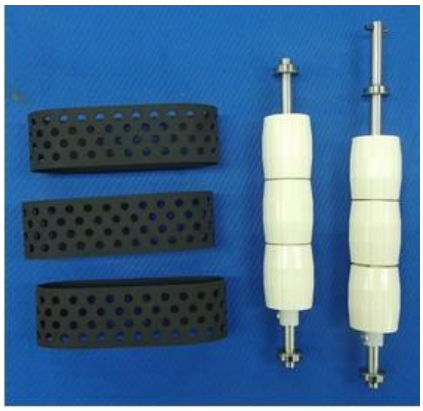

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Note

- During installation, turn the shaft to correct belt deflection before installing the chamber.
- When all parts have been assembled, turn the shaft once more to check for deflection, resistance and other abnormalities before replacing the paper tray.

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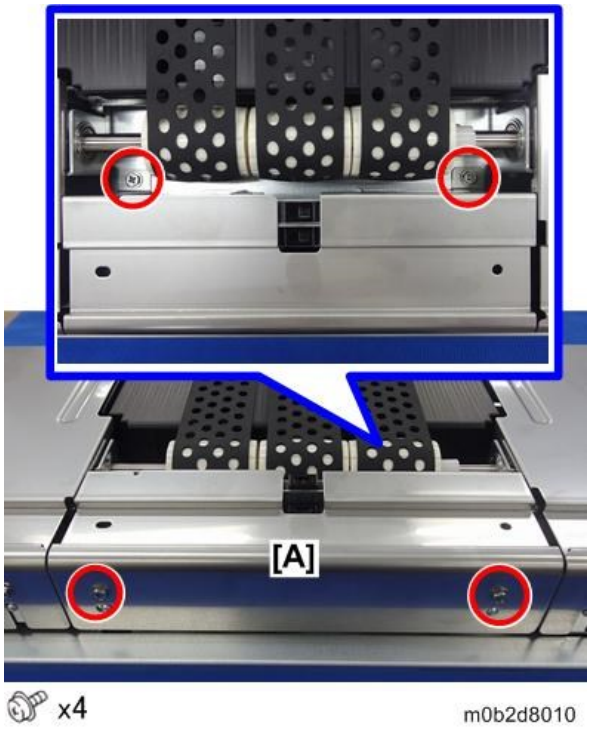
Paper End Sensor 1

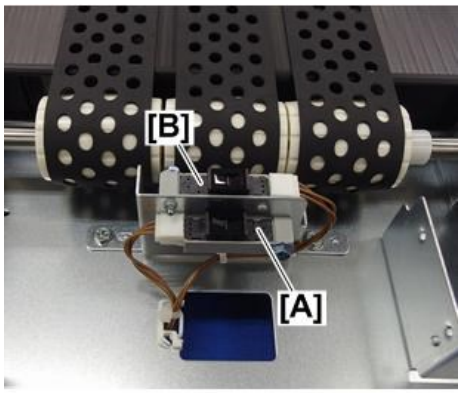
1. Remove the paper feed belt unit (Paper Feed Belt Unit)
2. Remove the center guide plate [A].



Note

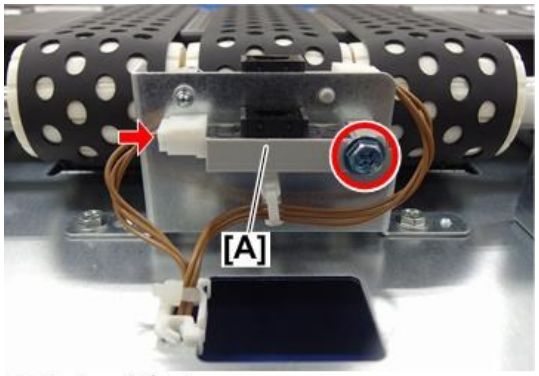
Paper end sensor 1 position [A]

Paper end sensor 2 position [B]

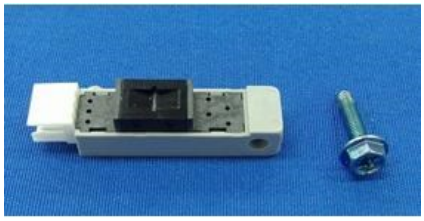


m0b2d8011

3. Remove paper end sensor 1 [A].



x1 x1 m0b2d8017

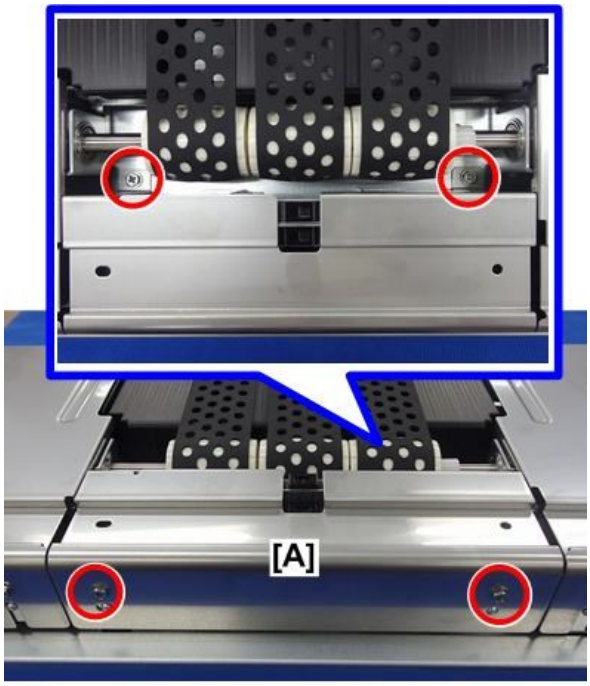


m0b2d8013

Paper End Sensor 2

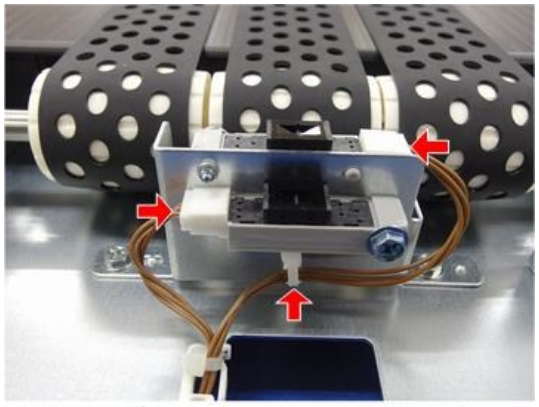
1. Remove the paper feed belt unit (Paper Feed Belt Unit)

2. Remove the center guide plate [A].



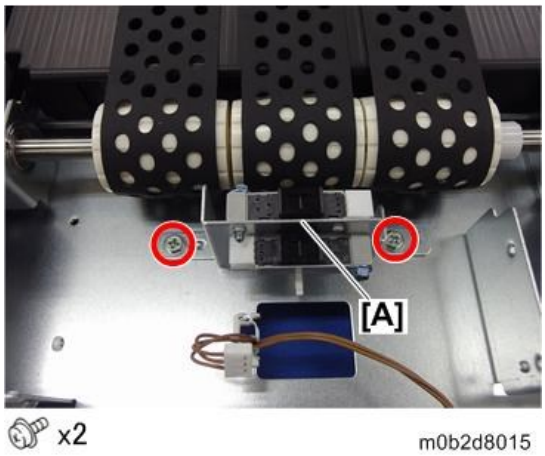
x4 m0b2d8010

3. Release the connectors and clamps of paper end sensors 1 and 2.

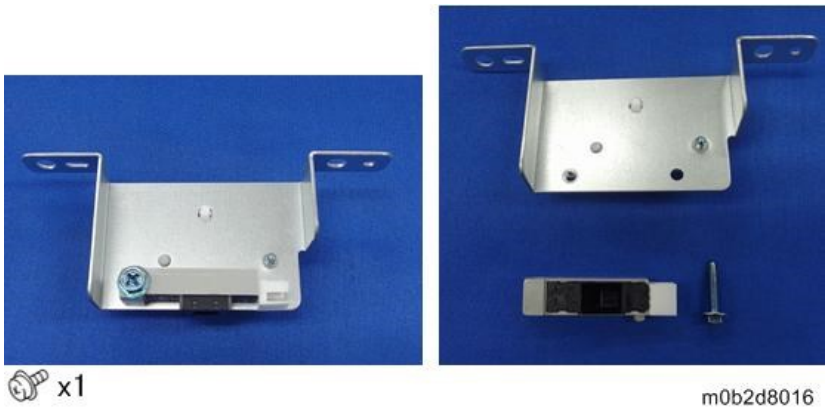


x2 x1 m0b2d8014

4. Remove the sensor bracket [A].



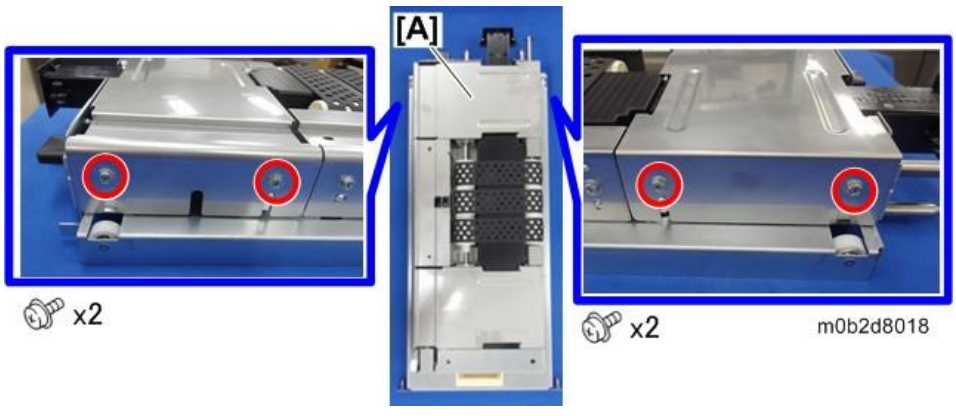
5. Remove paper end sensor 2 from the sensor bracket.



Suction Fan Shutter Solenoid

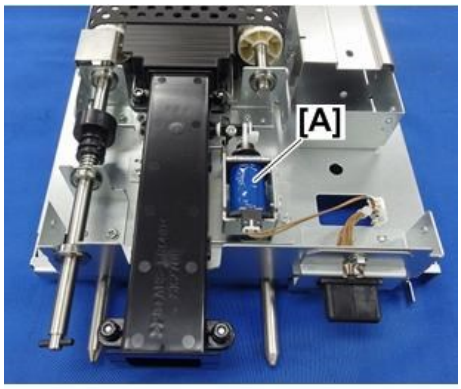
1. Remove the paper feed belt unit (Paper Feed Belt Unit)

2. Remove the guide plate [A] on the duct side.



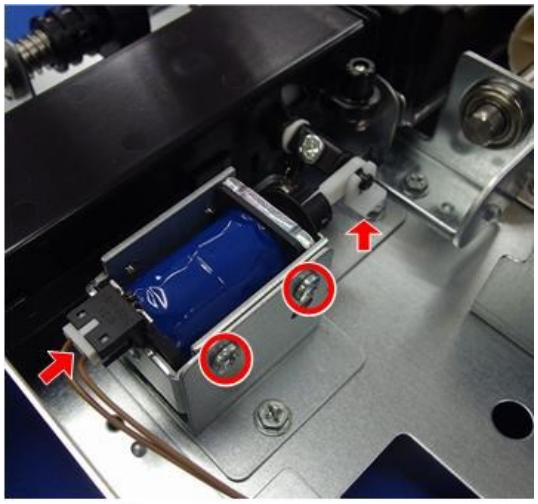
Note

The position of the suction fan shutter solenoid [A]



m0b2d8019

3. Remove the suction fan shutter solenoid.



x1 x1 x2 m0b2d8020

m0b2d8021

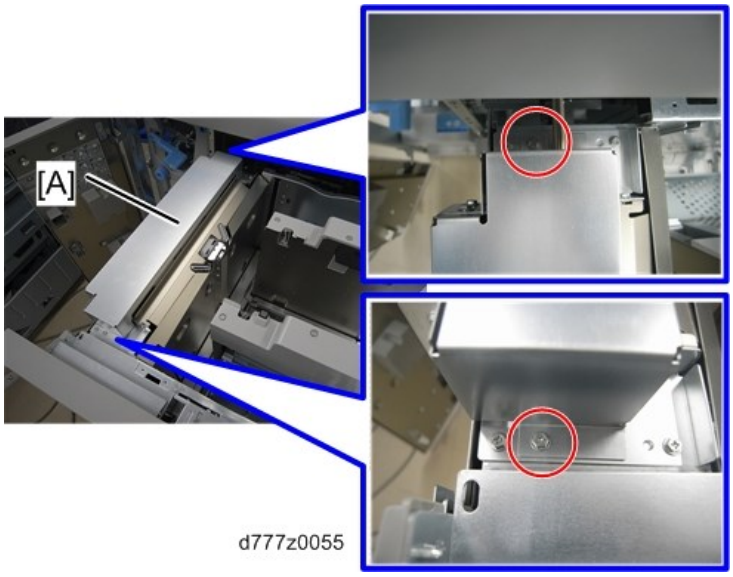
Paper Feed Sensor

Note

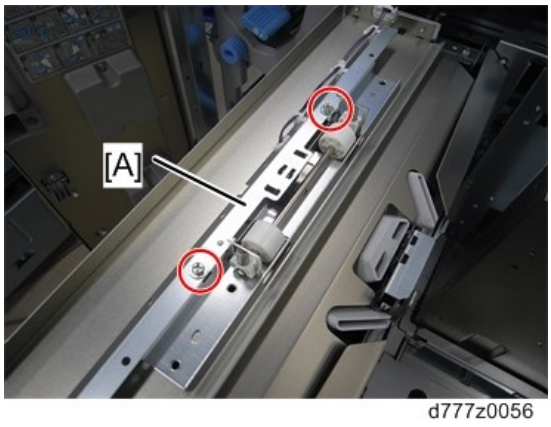
- The replacement procedures for the paper feed sensor of trays 1 and 2 are the same. The

following is the procedure for replacing the paper feed sensor of tray 1.

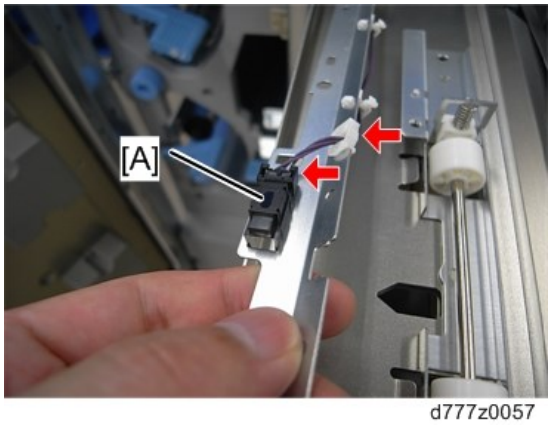
1. Pull out the paper tray.
2. Remove the top cover [A] of the transport roller unit (x2).



3. Remove the paper feed sensor bracket [A] (x2)

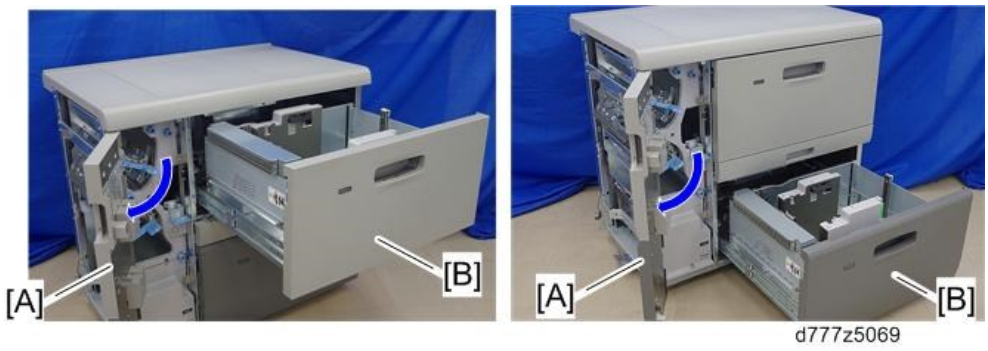


4. Remove the paper feed sensor [A] (x1, x1)

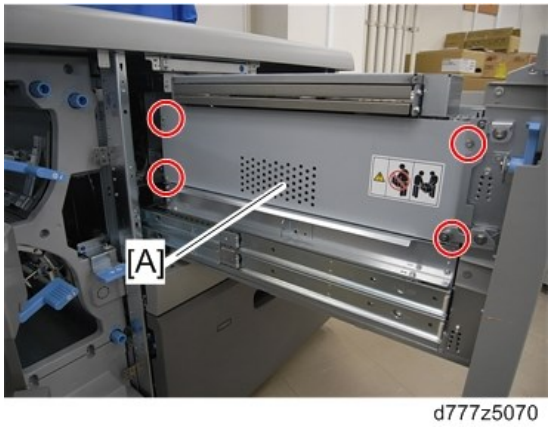


Transport Roller Unit

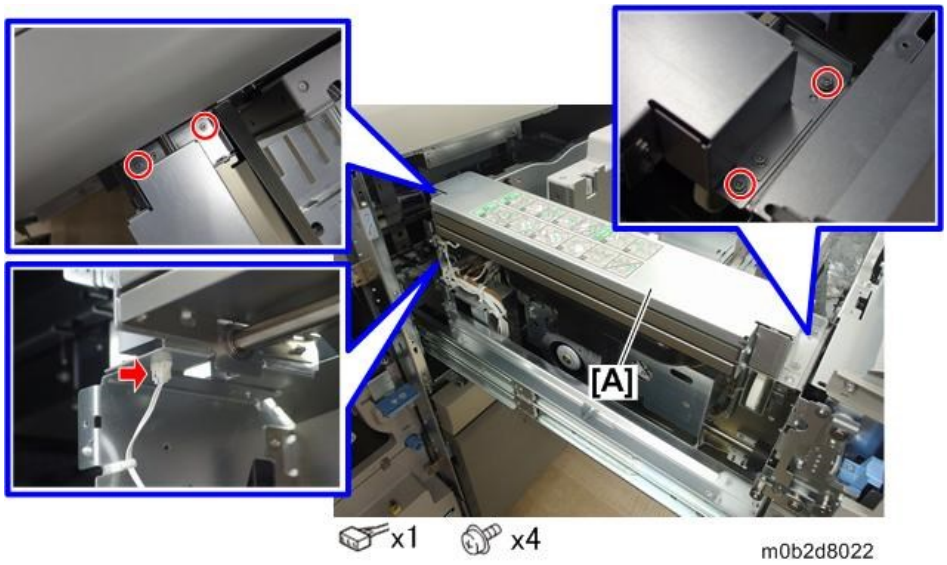
1. Open the front door [A] and pull out the paper tray [B].



2. Remove the tray left upper cover [A] (x4)



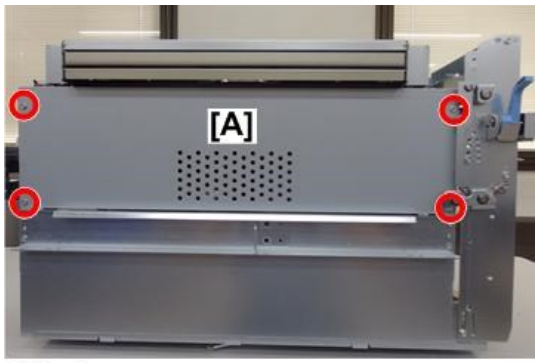
3. Remove the transport roller unit [A].



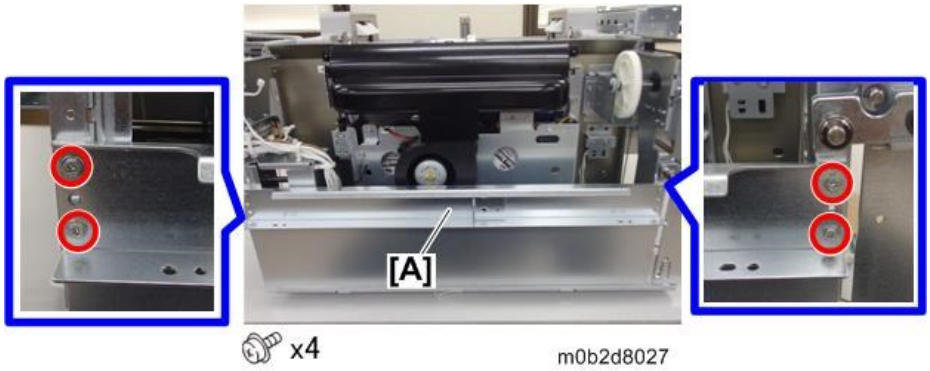
Float/Separation/Return Fan Duct

1. Remove the paper tray (Paper Tray)

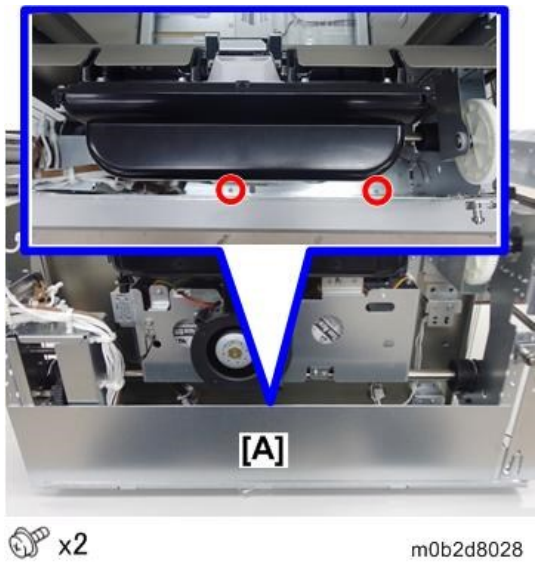
2. Remove the left upper cover [A] of the paper tray.



3. Remove the transport roller unit (Transport Roller Unit)
4. Remove the left rail plate [A].

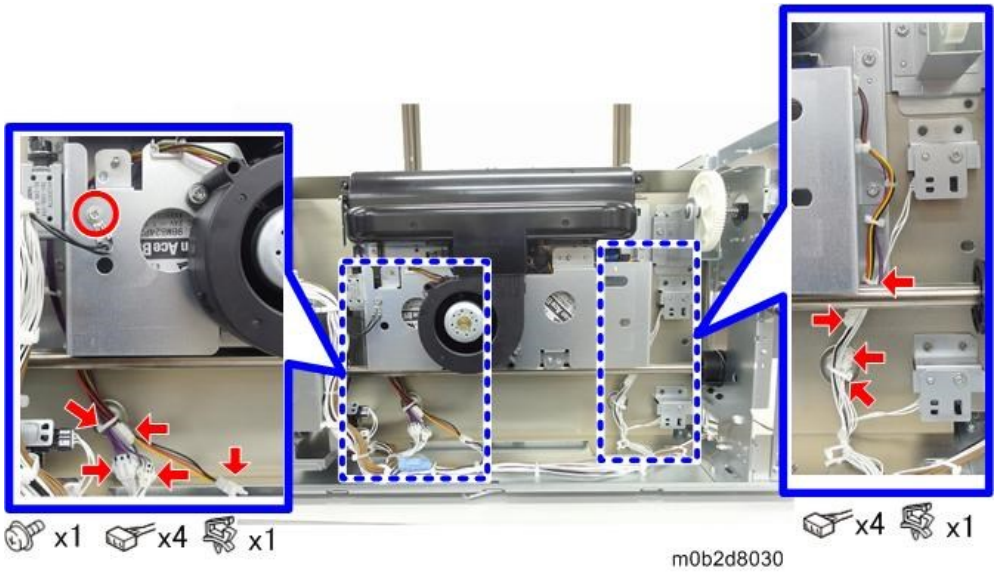


5. Remove the plate [A].



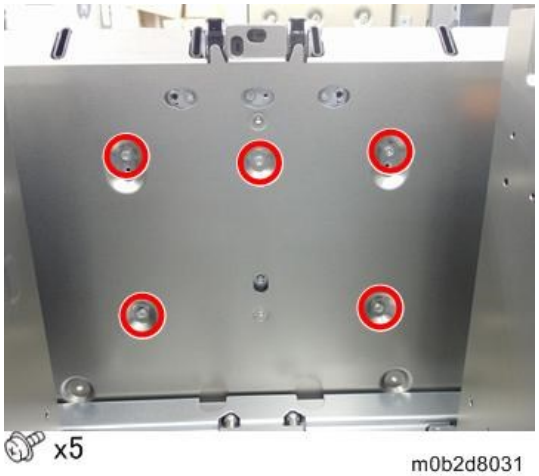
6. Remove the ground wire.

7. Release the clamps and disconnect the connectors connected to the fan duct.

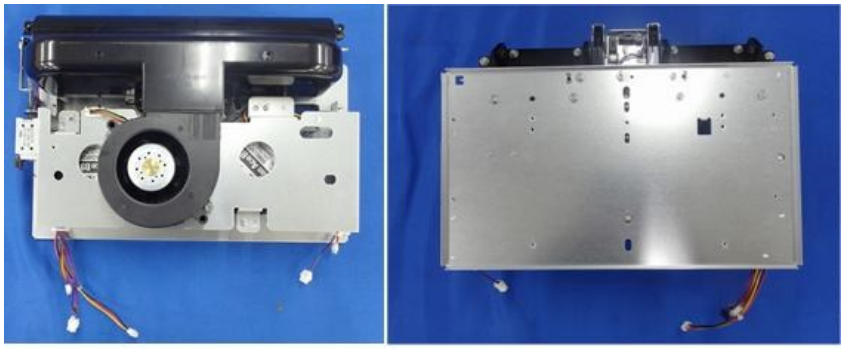


m0b2d8030

8. Remove the screws on the inside of the paper tray and then remove the fan duct.



m0b2d8031



m0b2d8032

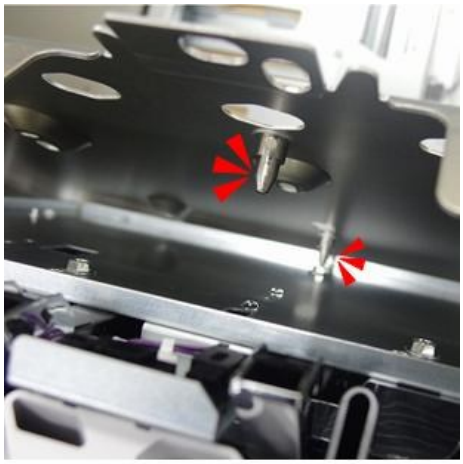
Important

Do not remove the screws that fix the position of the float/separation/return fan duct. The position of the float/separation/return fan duct is fixed in the factory and cannot be adjusted outside the factory.

m0b2d8031a

Note

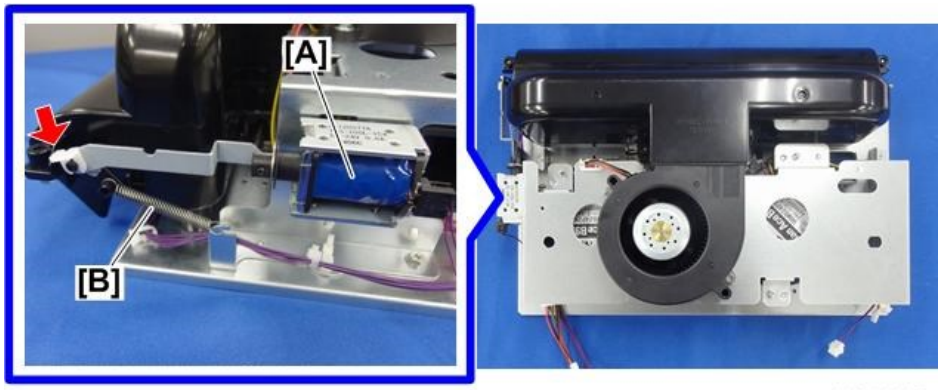
When installing the float/separation/return fan duct, make sure that the two position adjustment pins shown below are inserted in the holes in the duct.



m0b2d8033

Float/Separation/Return Fan Bracket

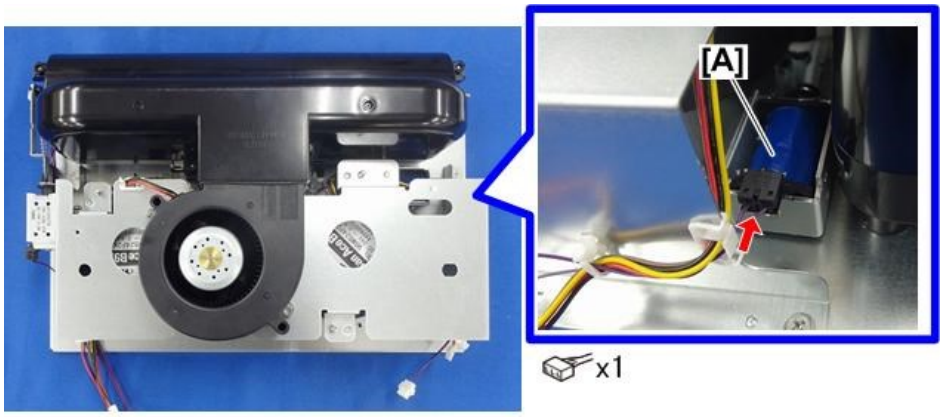
1. Remove the float/separation/return fan duct (Float/Separation/Return Fan Duct)
2. Remove the clip (red arrow) of the float fan shutter solenoid [A] and spring [B].



x1 x1

m0b2d8035

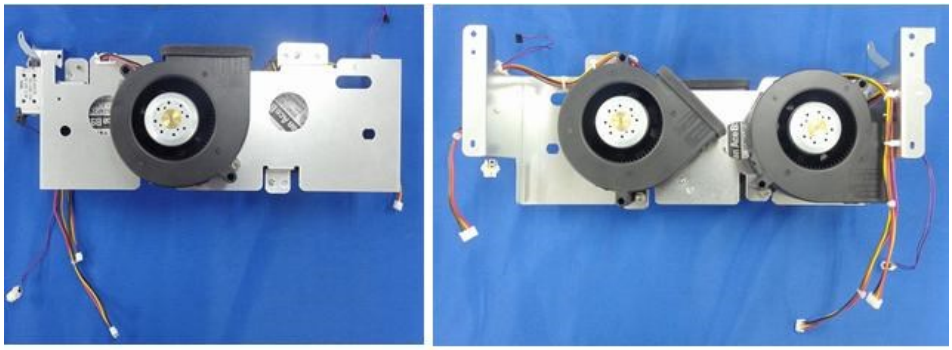
3. Disconnect the connector of the return solenoid [A].



m0b2d8035a

4. Release the clamp of the float/separation/return fan bracket, remove the screws and then remove the float/separation/return fan brackets.

m0b2d8034

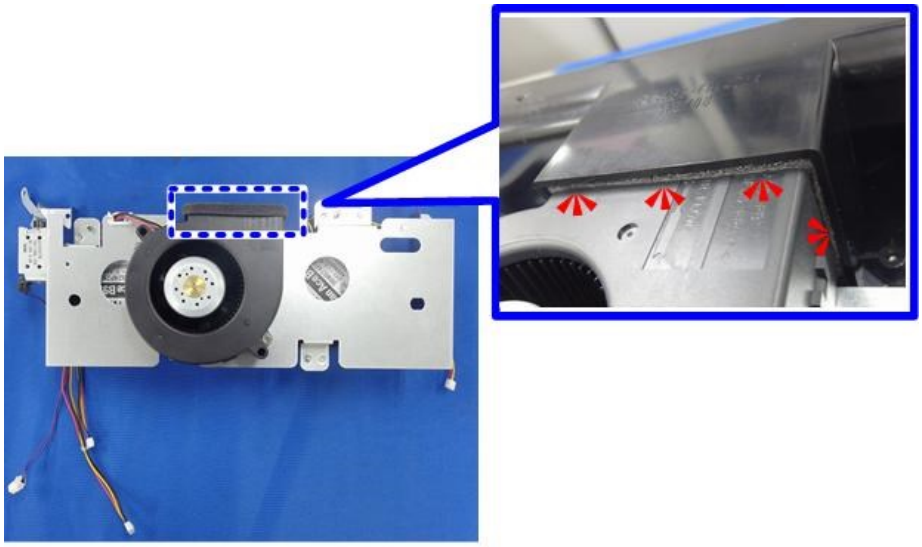


m0b2d8036

Notes for Installing the Float/Separation/Return Fan Bracket

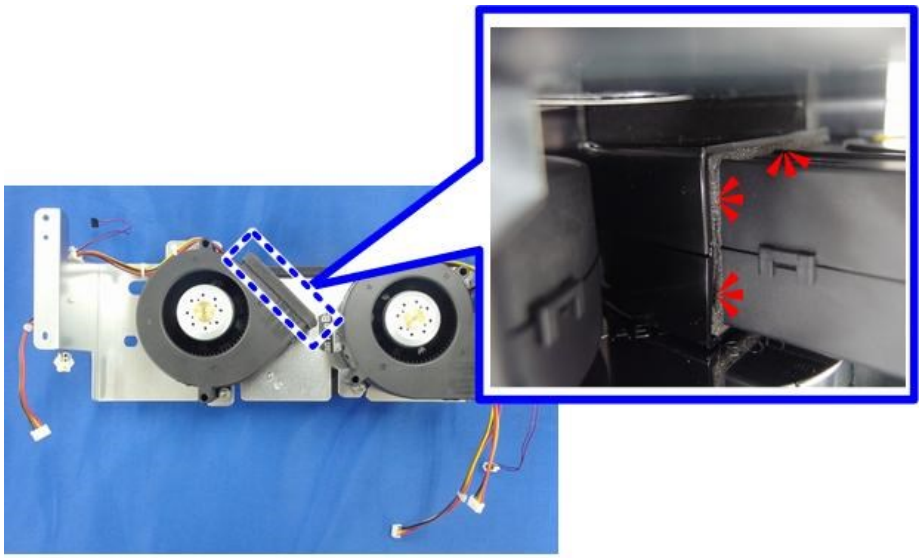
When attaching the float / separation / return fan bracket, insert the covering sponge of the float fan / separation fan all around the duct firmly so that there is no gap.

Float Fan Bracket



m0b2d8042

Separation Fan Bracket



m0b2d8043

Important

When it is difficult to insert a sponge, firmly push it with moderate force, by using a ruler for example.

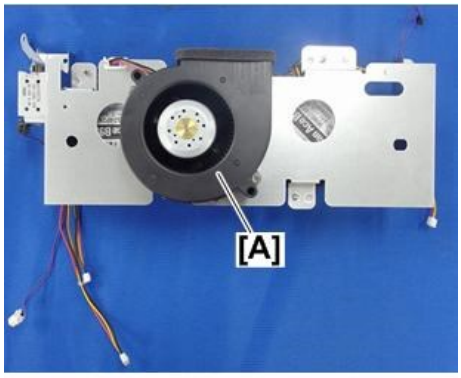
m0b2d8044

Float Fan

1. Remove the float/separation/return fan bracket (Float/Separation/Return Fan Bracket)

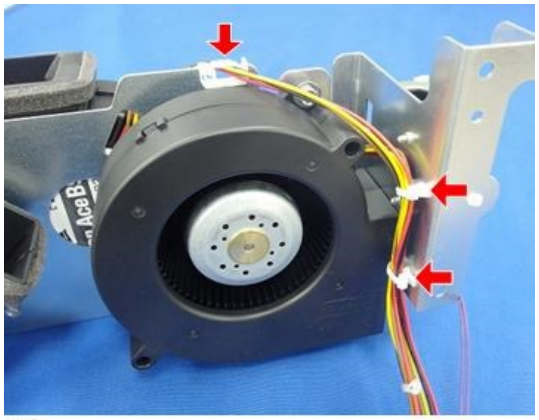
Note

The position of the float fan [A]



m0b2d8037

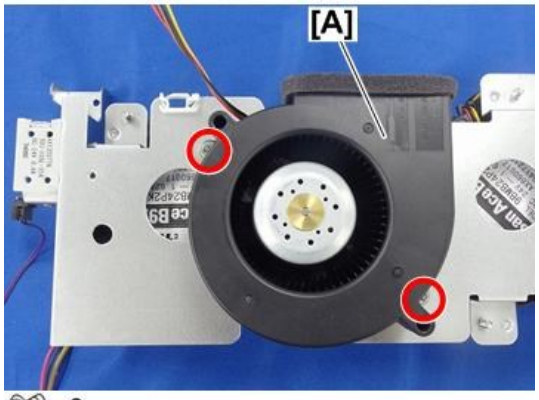
2. Release the clamp that fixes the harness of the float fan on the back side of the float/separation/return fan bracket.



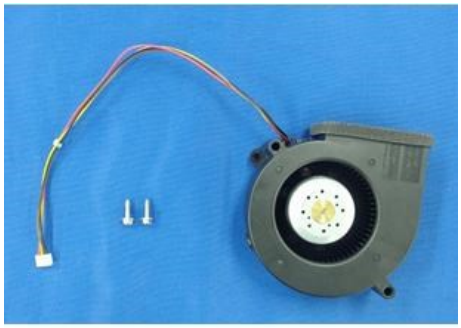
x3

m0b2d8038

3. Remove the screws and the float fan [A].



m0b2d8039



m0b2d8040

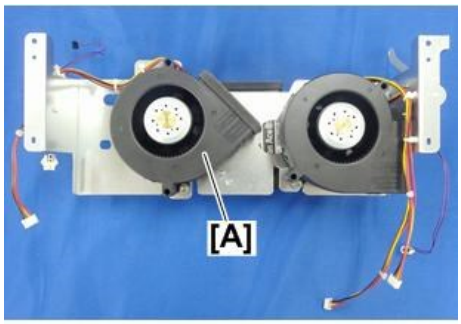
Separation Fan

1. Remove the float/separation/return fan duct (Float/Separation/Return Fan Duct)

2. Remove the float/separation/return fan bracket (Float/Separation/Return Fan Bracket)

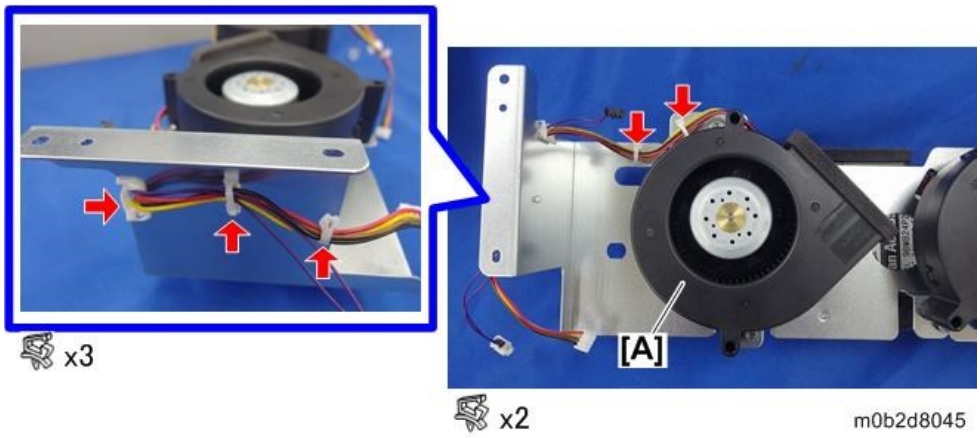
Note

The position of the separation fan [A]

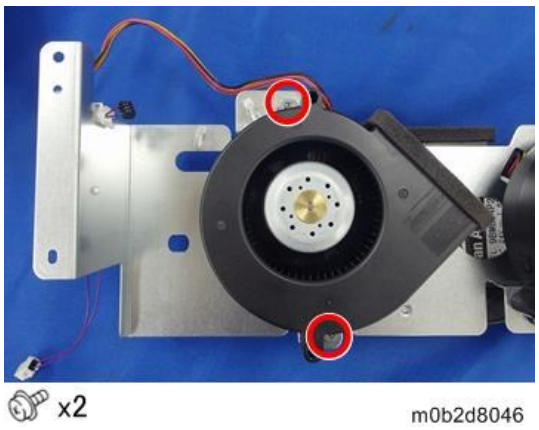


m0b2d8041

3. Release the clamp and the harness of the separation fan [A].



4. Remove the screws and the separation fan.

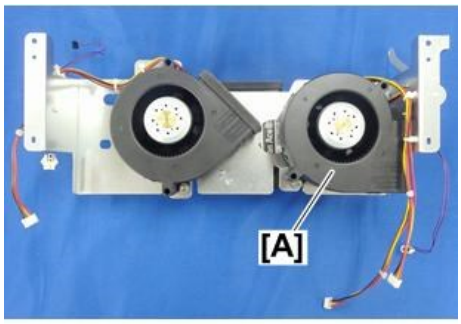


Return Fan

1. Remove the float/separation/return fan duct (Float/Separation/Return Fan Duct)
2. Remove the float/separation/return fan bracket (Float/Separation/Return Fan Bracket)

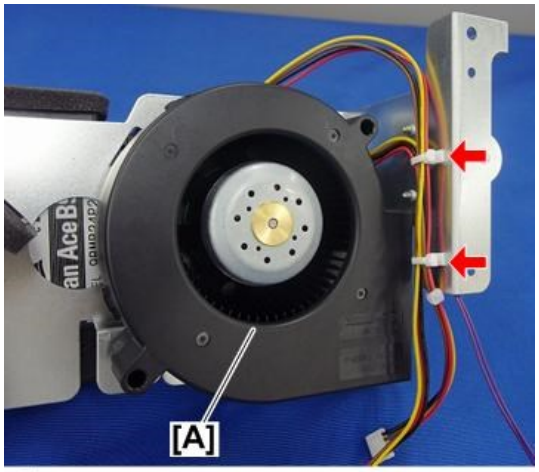
Note

The position of the return fan [A]



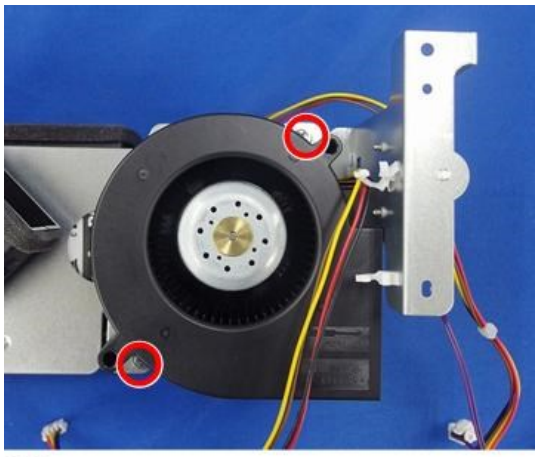
m0b2d8041a

3. Release the clamp and the harness of the return fan [A].



x2 m0b2d8048

4. Remove the screws and the return fan.



x2 m0b2d8049

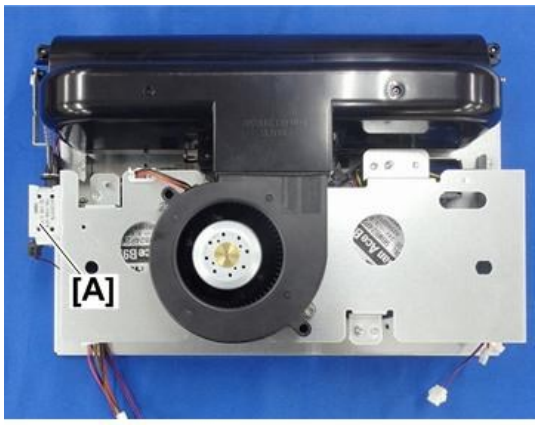
m0b2d8050

Float Fan Shutter Solenoid

1. Remove the float/separation/return fan duct (Float/Separation/Return Fan Duct)

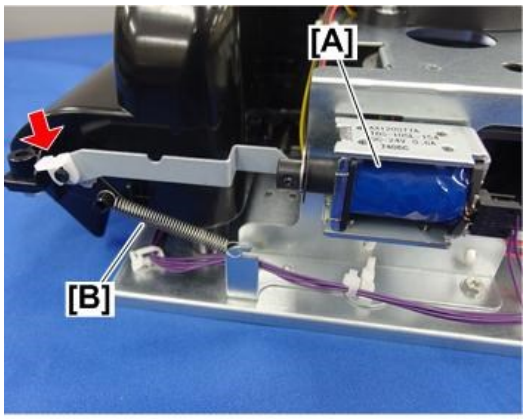
Note

The position of the float fan shutter solenoid [A]



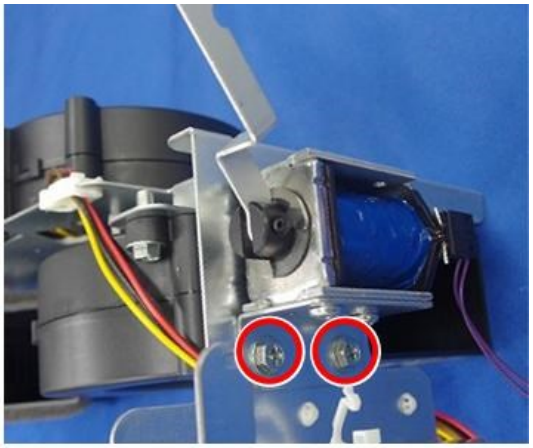
m0b2d8052

2. Remove the clip (red arrow) of the float fan shutter solenoid [A] and spring [B].

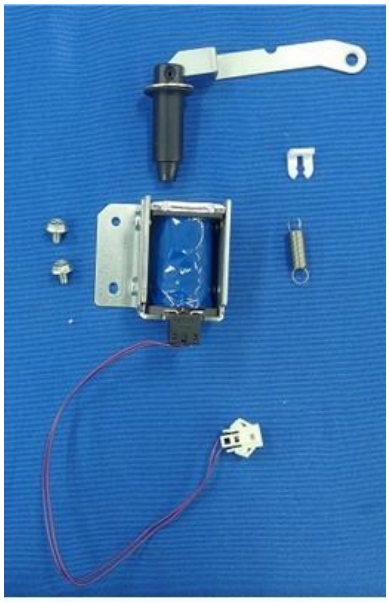


x1 x1 m0b2d8051

3. Remove the screws to detach the float fan shutter solenoid.



x2 m0b2d8053



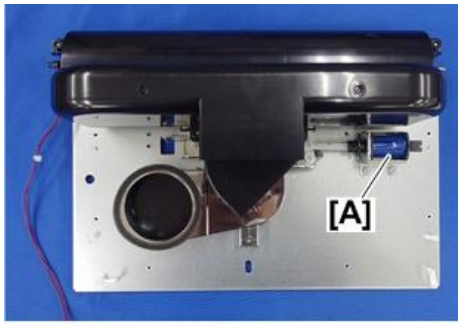
m0b2d8054

Return Solenoid

1. Remove the float/separation/return fan bracket (Float/Separation/Return Fan Bracket)

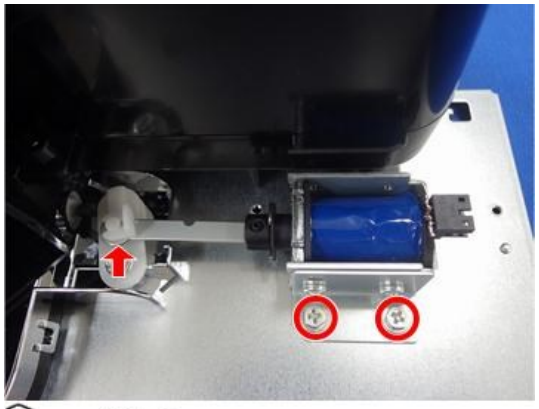
Note

The position of the return solenoid [A] (attached to the float/separation/return fan duct)

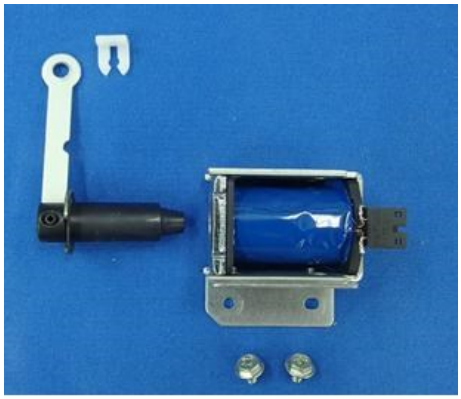


m0b2d8055

2. Remove the clip of the return solenoid.
3. Remove the screws to detach the return solenoid.



x1 x2 m0b2d8056



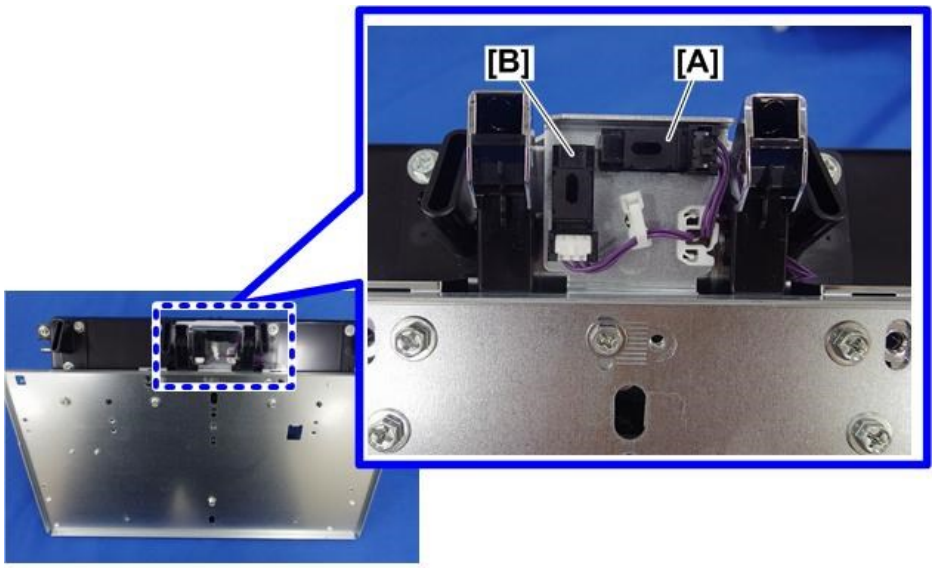
m0b2d8057

Paper Upper Limit Sensor 1, 2

1. Remove the float/separation/return fan duct (Float/Separation/Return Fan Duct)

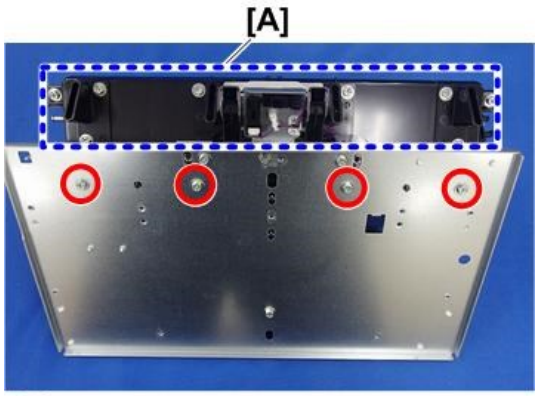
Note

The position of the paper upper limit sensor 1 [A], 2 [B]



m0b2d8058

2. Unscrew the screws on the back side of the float/separation/return fan duct, to remove the duct [A].

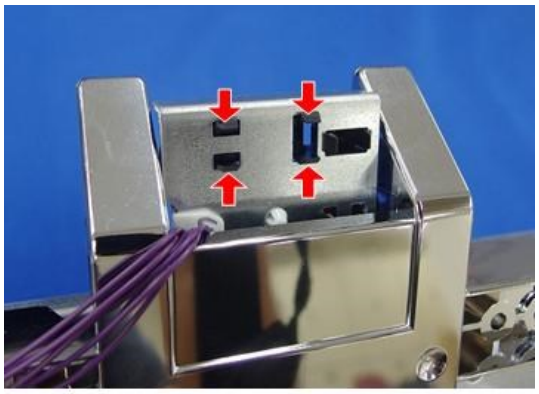


x4

m0b2d8059

m0b2d8060

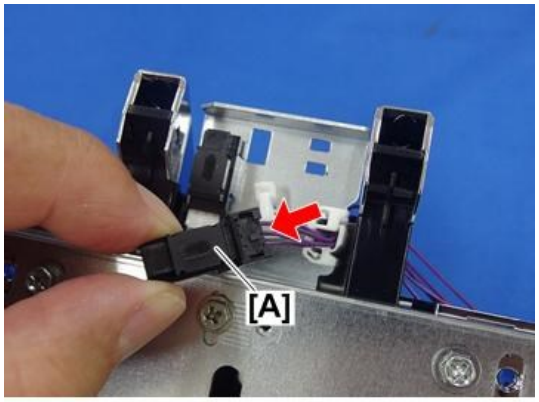
3. Release the pawls of paper upper limit sensor 1.



x4

m0b2d8061

4. Remove the connector of paper upper limit sensor 1 [A] from the front side.

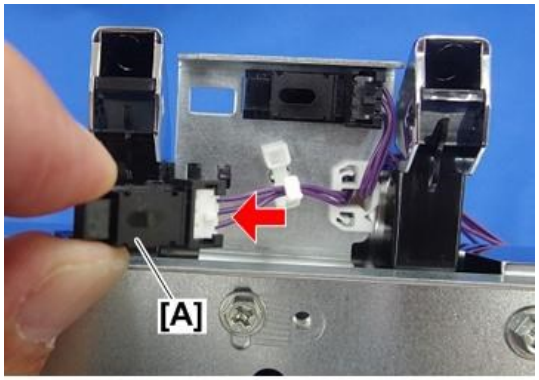


x1

m0b2d8062

m0b2d8063

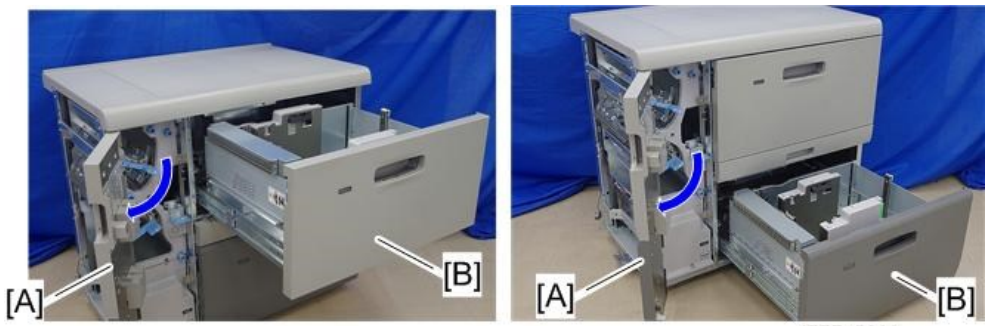
5. Release the pawl of paper upper limit sensor 2 from the back side and remove the connector of paper upper limit sensor 2 [A] from the front side.



m0b2d8064

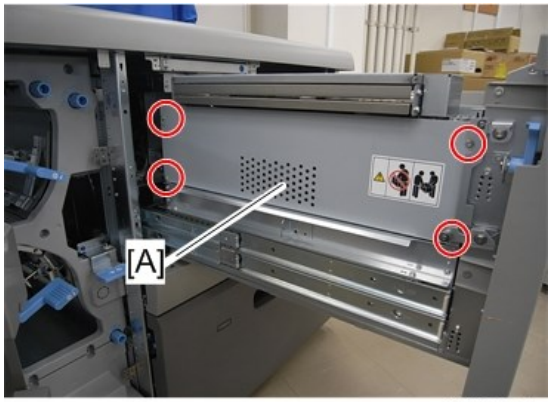
Paper Height Middle Sensor

1. Open the front door [A] and pull out the paper tray [B].



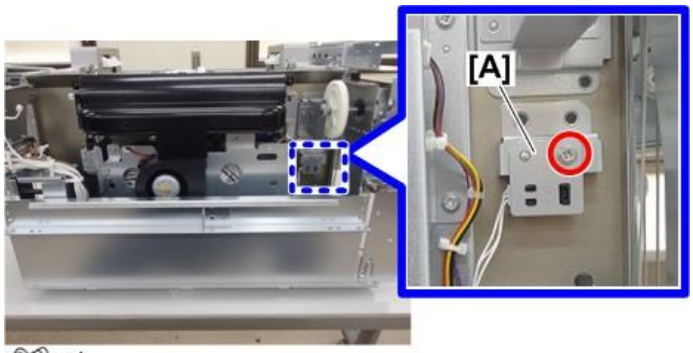
d777z5069

2. Remove the tray left upper cover [A] (x4)



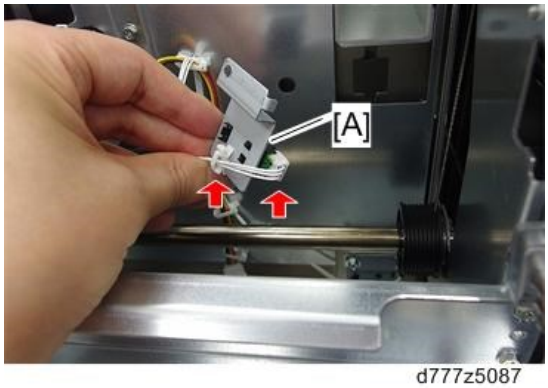
d777z5070

3. Remove the paper height middle sensor bracket [A].



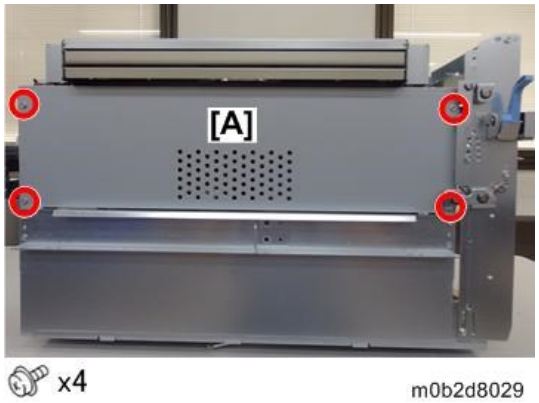
m0b2d8068

4. Remove the paper height middle sensor [A] (x1, x1)

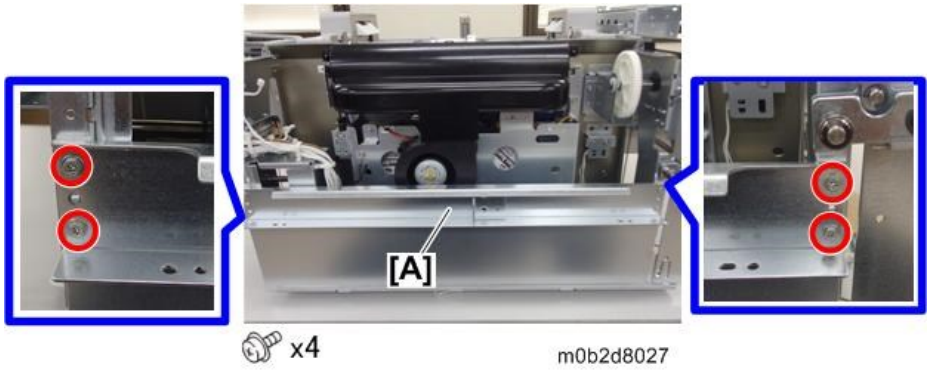


Paper Lower Limit Sensor

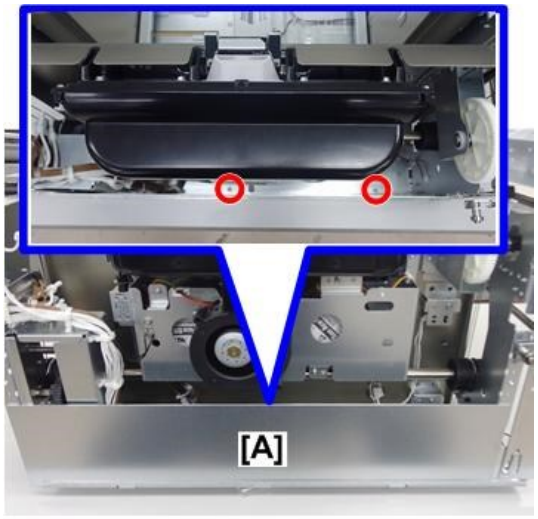
1. Remove the paper tray (Paper Tray)
2. Remove the tray left upper cover [A].



3. Remove the transport roller unit (Transport Roller Unit)
4. Remove the left rail plate [A].



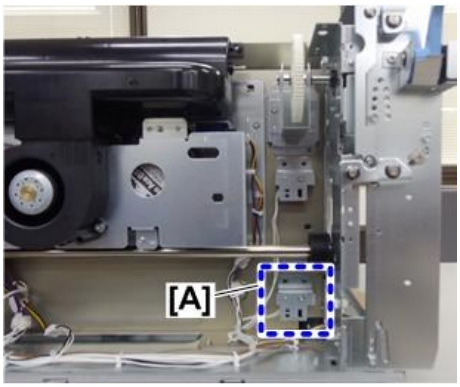
5. Remove the plate [A].



x2 m0b2d8028

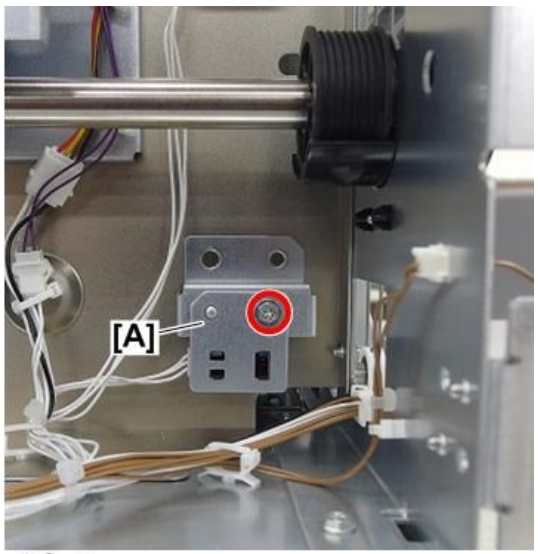
Note

The position of the paper lower limit sensor [A]



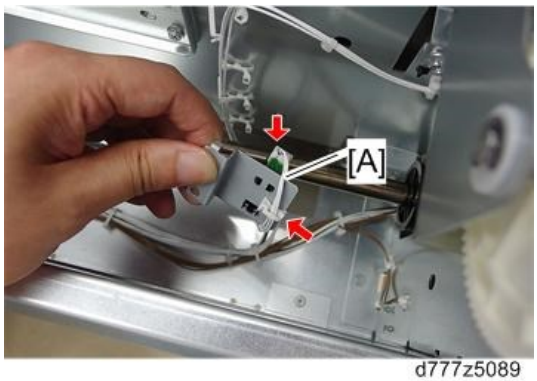
m0b2d8069

6. Remove the paper lower limit sensor bracket [A].



x1 m0b2d8070

7. Remove the paper lower limit sensor [A] (x1, x1)

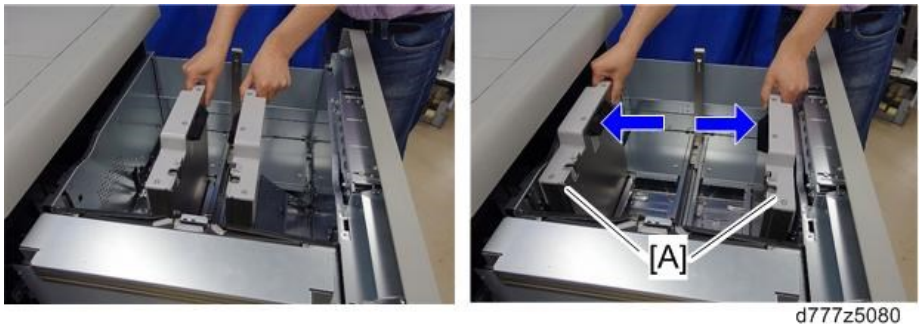


d777z5089

LCIT Paper Length Sensors 1 and 2

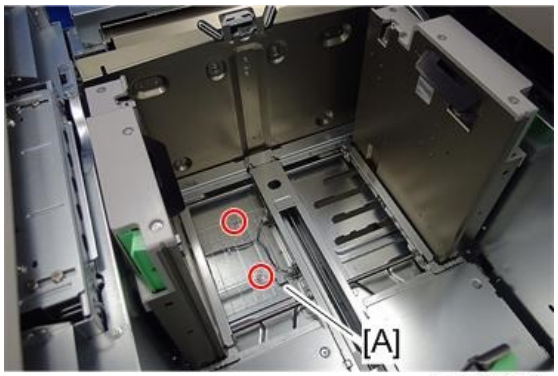
1. Open the paper tray.

2. Hold the side fence lock to open the side fence [A].



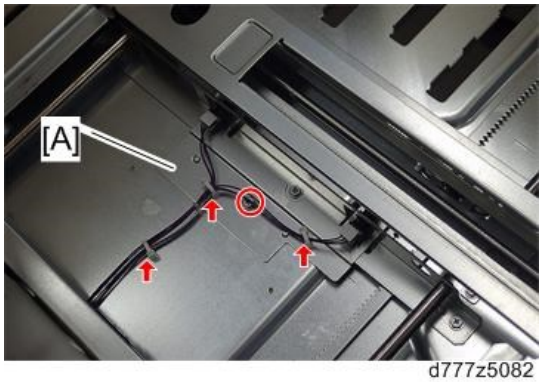
d777z5080

3. Remove the sensor cover [A] (x2)



d777z5081

4. Remove the sensor bracket [A] (x3, x1)



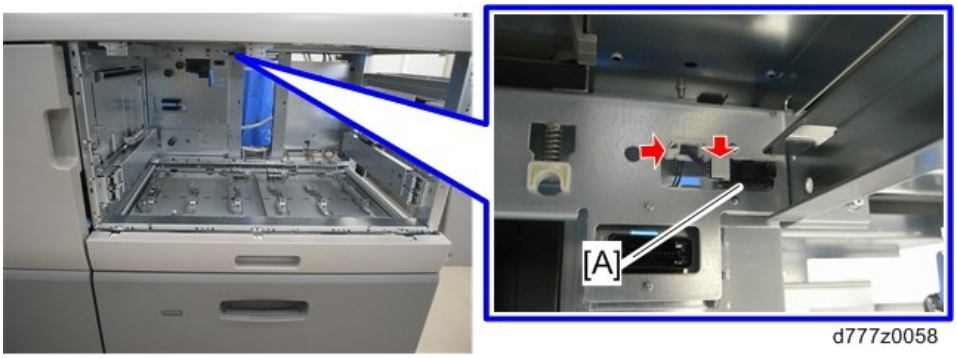
d777z5082

5. Remove LCIT paper length sensor 1 [A] (x1)
6. Remove LCIT paper length sensor 2 [B] (x1)

d777z5083

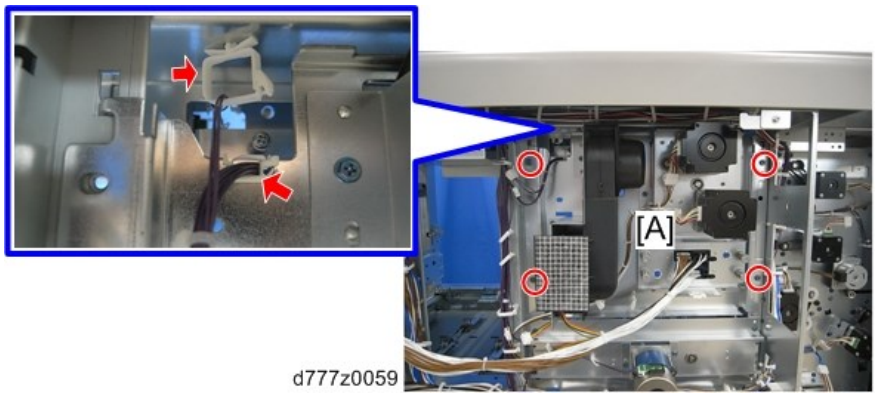
Tray Upper Limit Sensor

1. Remove the paper tray (Paper Tray)
2. Remove the paper feed belt unit (Paper Feed Belt Unit)
3. Remove the tray upper limit sensor [A]
   - The sensor pawl is on the rear of the frame. Access it from the rear of the main unit if it proves difficult to remove it from the front.



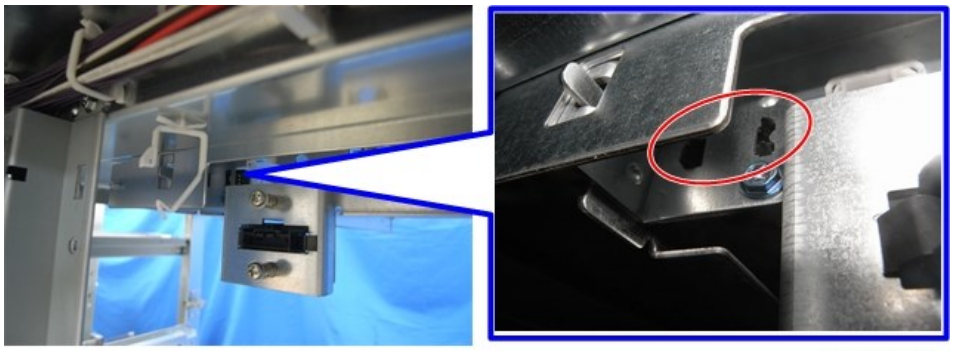
d777z0058

4. Remove the rear right and left covers (Rear Right Cover,Rear Left Cover).
5. Remove the bracket [A] (x2, x4)



d777z0059

6. Remove the pawl of the tray upper limit sensor.

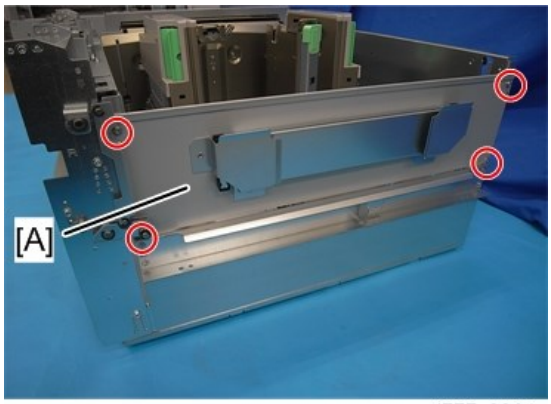


d777z0060

Side Fences (Front, Rear)

Common Procedure for Removing the Side Fences (Front, Rear)

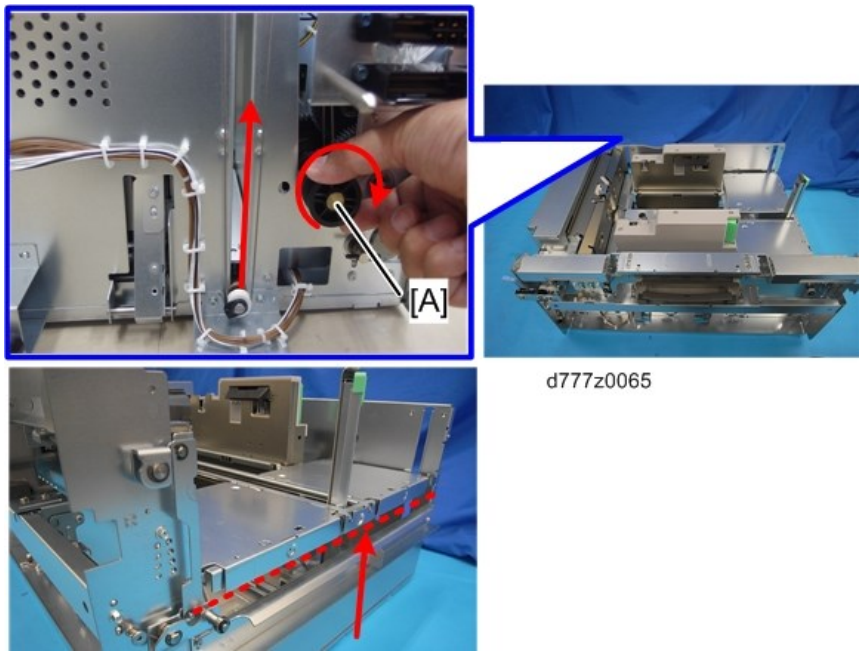
1. Remove the tray front cover. (Tray Front Cover (Tray 1, 2))
2. Remove the paper tray. (Paper Tray)
3. Remove the plate [A] from the end fence side. (x4).



d777z0064

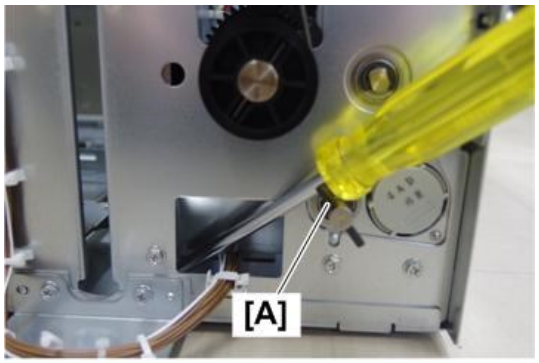
4. Turn the wire pick-up roller [A] at the rear of the paper tray in a clockwise direction to raise the

bottom plate until it becomes visible on the end fence side.



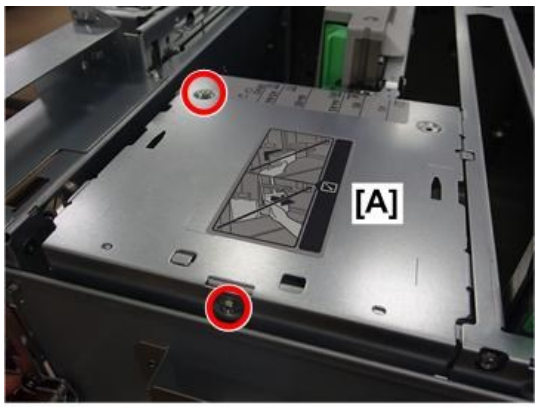
d777z0065

5. When the bottom plate has been raised, insert a screwdriver or similar object in the hole in the sheet metal at the bottom of the wire pick-up roller to prevent the pin [A] from turning.



d194d9527

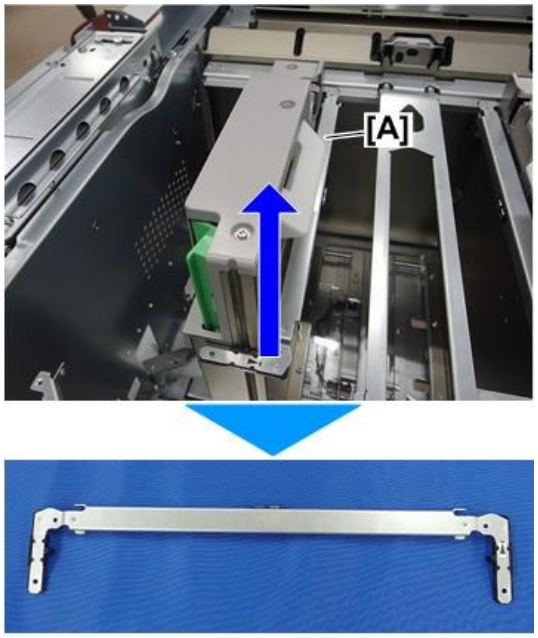
6. Remove the bottom plate [A] on the front side.



x2

m0b2d8108

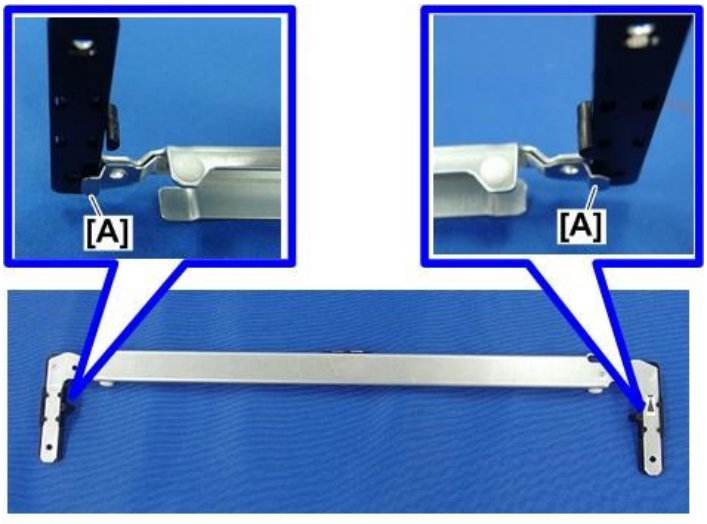
7. Remove the side fence guide [A].



m0b2d8109

Note

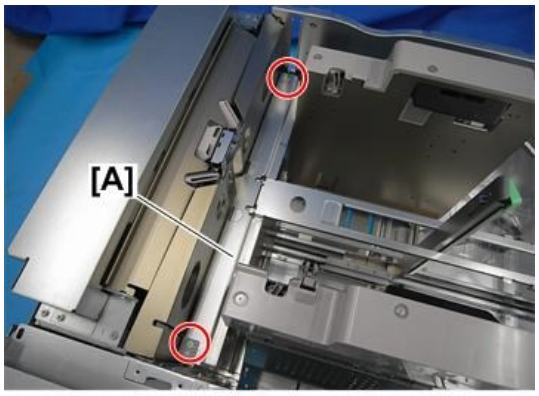
The guide is secured by the hook parts [A] that fit on the bottom plate.



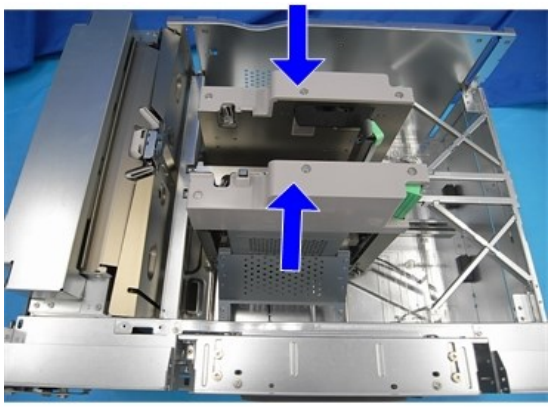
m0b2d8110

8. As the same way in the previous steps, remove the bottom plate on the rear side to remove the side fence guide.

9. Remove the plate [A] on the feed side.



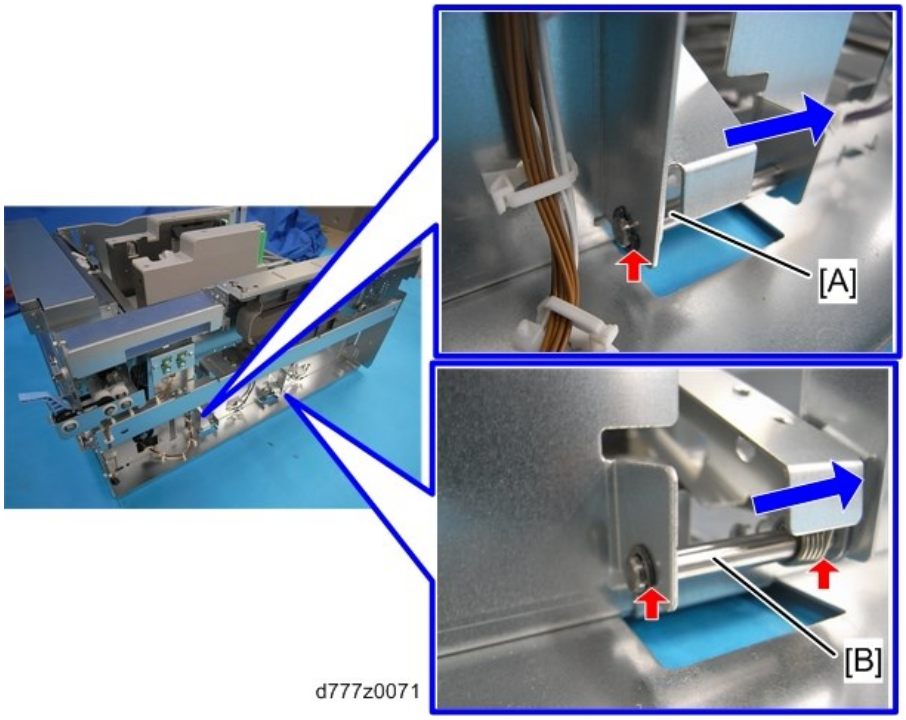
10. Fully close the side fences.



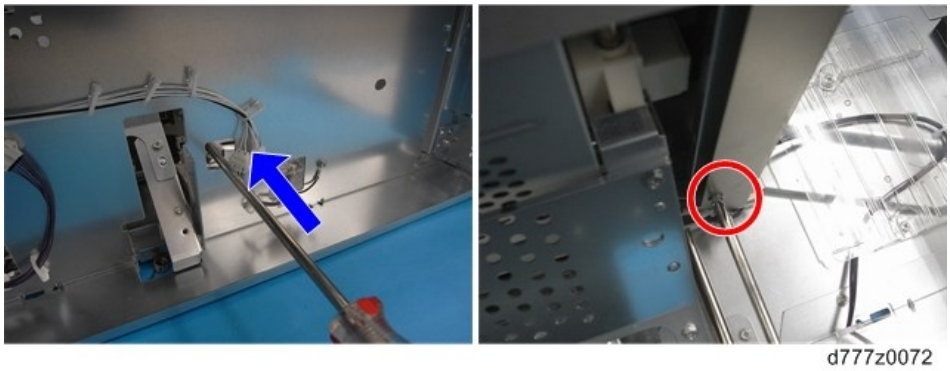
Side Fence (Front)

1. Remove the side fence shafts [A] and [B] on the front side (x2). Pull out the shaft in the direction

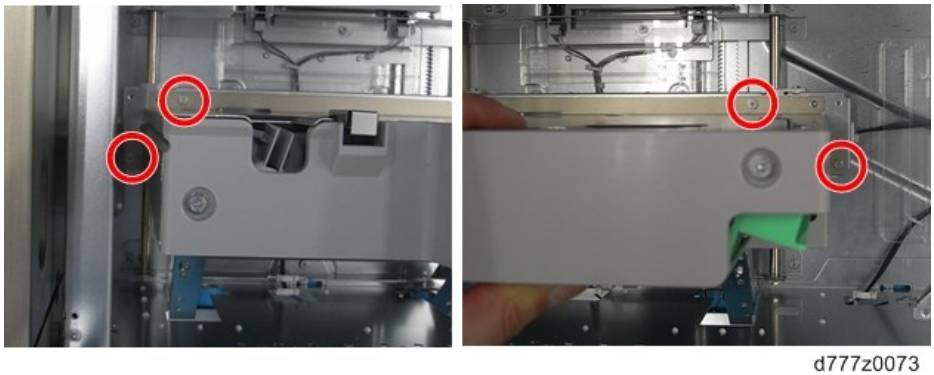
of the arrow. The [B] shaft has a spring.



2. Insert a screwdriver in the opening in the frame and remove the ground connection (x1).



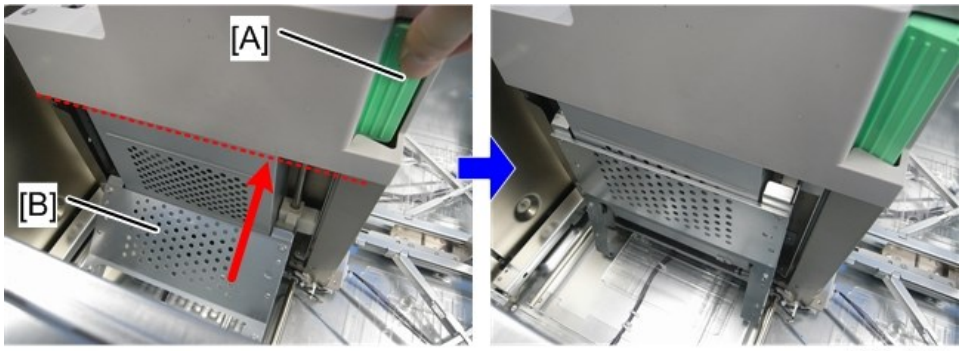
3. Remove the screws in the side fence (x4).



4. Release the clamp (x2)

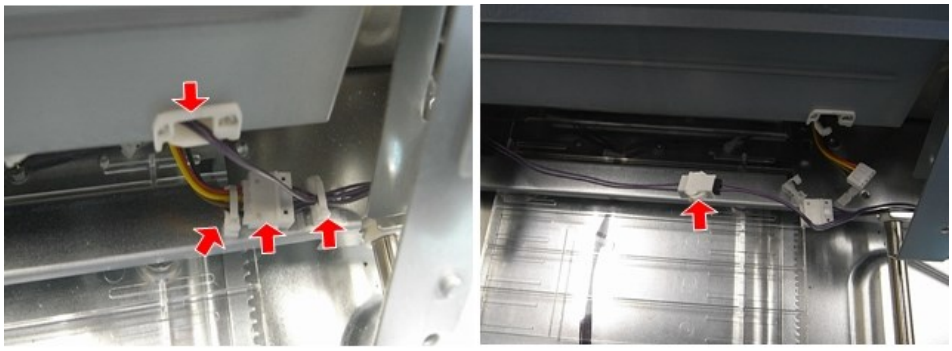
d777z0074

5. Hold down the lock lever [A] and raise the side fence [B].



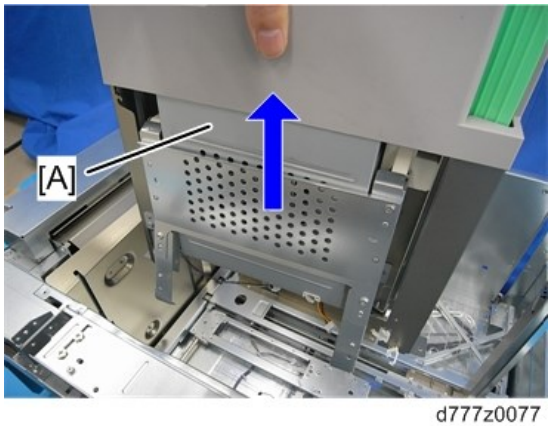
d777z0075

6. Remove the connectors from the bottom of the side fence (x3, x2).



d777z0076

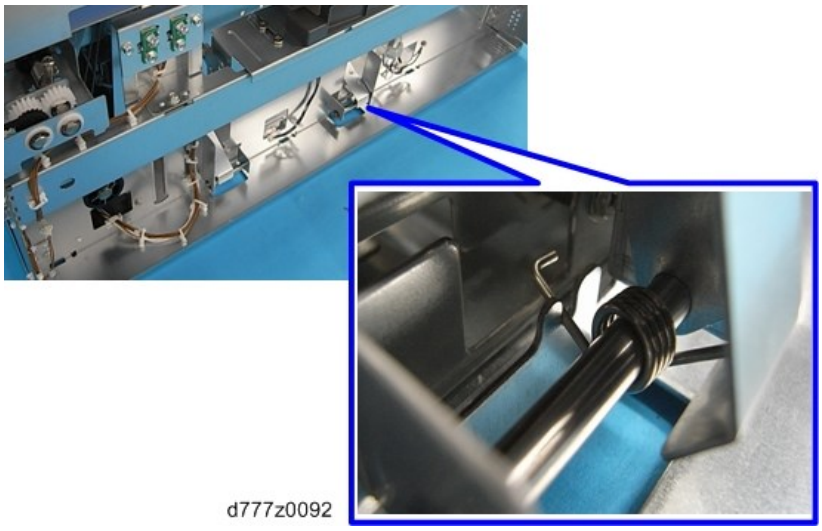
7. Raise the side fence (front) [A] and remove it.



d777z0077

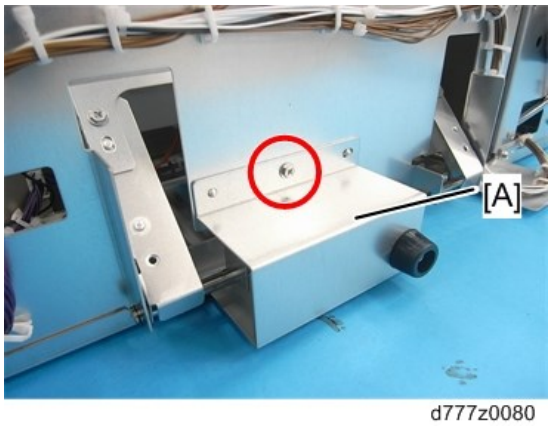
Note

Install the spring on the end face shaft as shown in the photo.



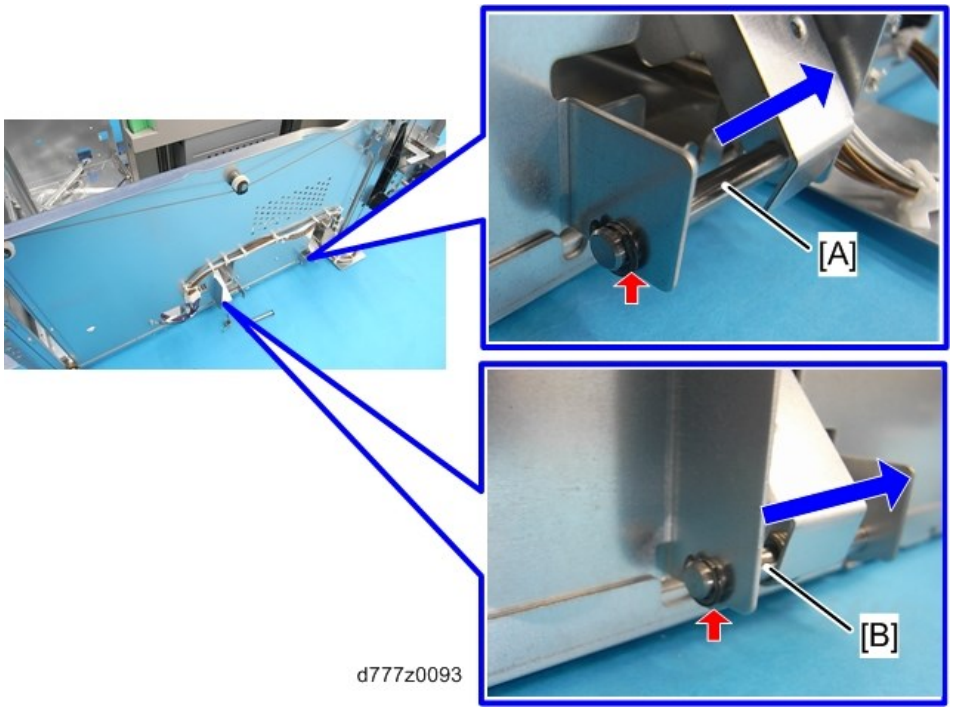
Side Fence (Rear)

1. Remove the bracket [A]. (x1)



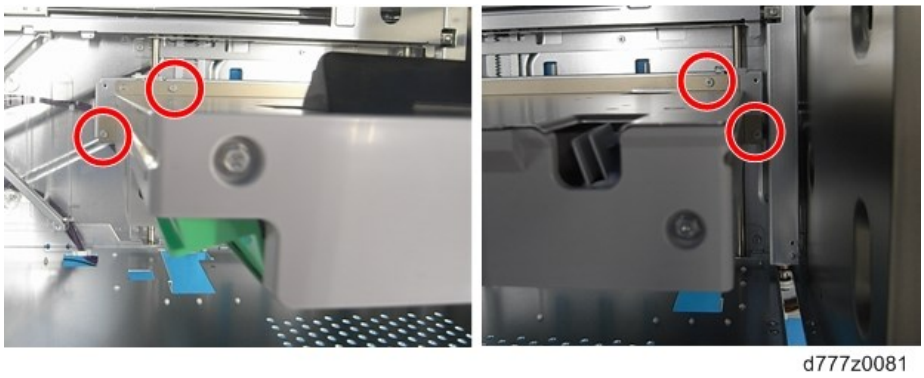
2. Remove the side fence shafts [A] and [B] on the rear side (x2). Pull out the shaft in the direction

of the arrow. The [B] shaft has a spring.

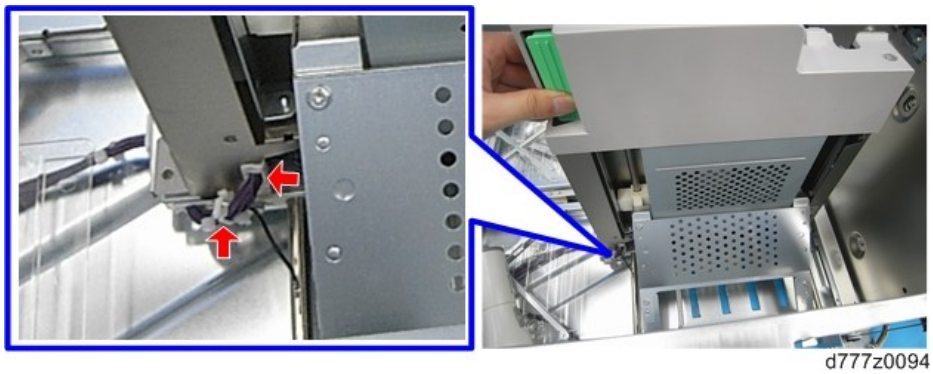


3. Insert a screwdriver in the opening in the frame and remove the ground connection (x1).

4. Remove the screws in the side fence (x4).

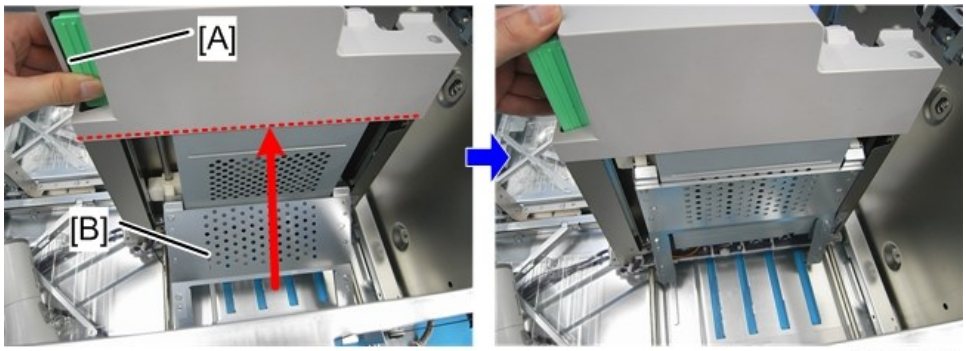


5. Release the clamp (x2).



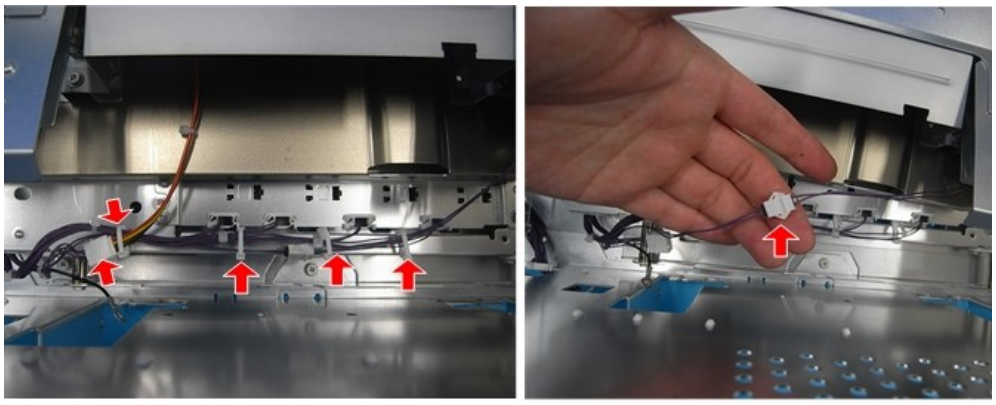
d777z0094

6. Hold down the lock lever [A] and raise the side fence [B].



d777z0079

7. Remove the connectors from the bottom of the side fence (x4, x2).

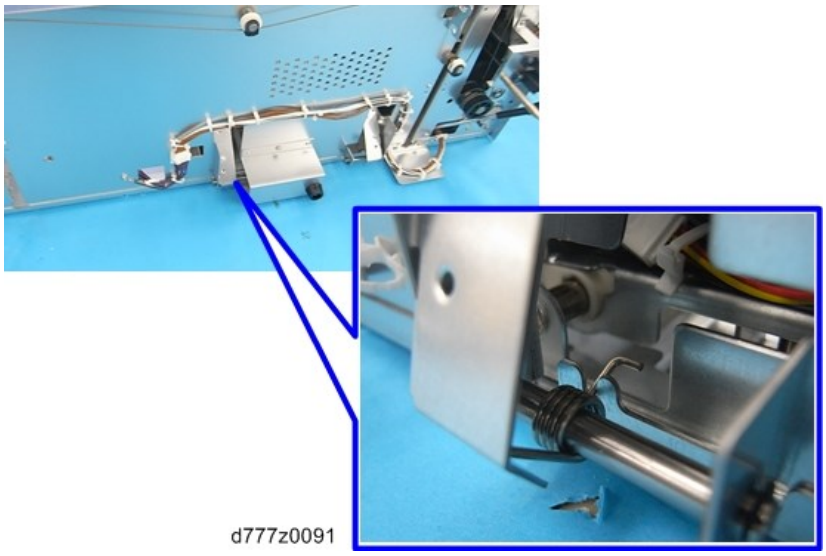


d777z0082

8. Lift the side fence (rear) and remove it.

Note

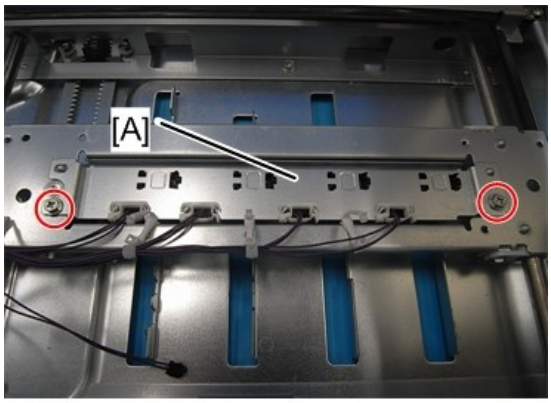
Install the spring on the end face shaft as shown in the photo.



d777z0091

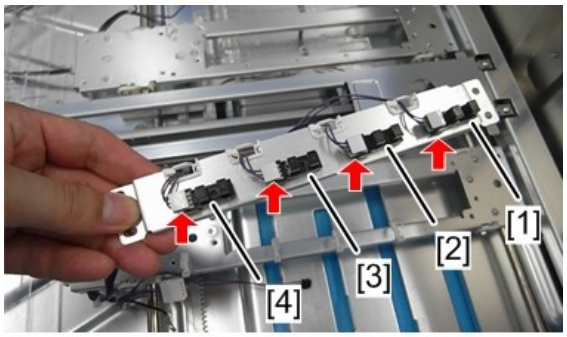
Paper Size Sensors

1. Remove the side fence (rear) (Side Fences (Front, Rear))
2. Remove the sensor bracket [A] (x2)



d777z0089

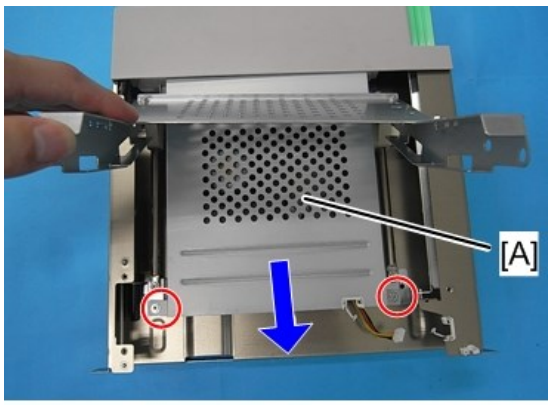
3. Remove the paper size sensors [1] to [4] (x4, x4). The sensors are located in order 1 to 4 on the paper feed side.



d777z0090

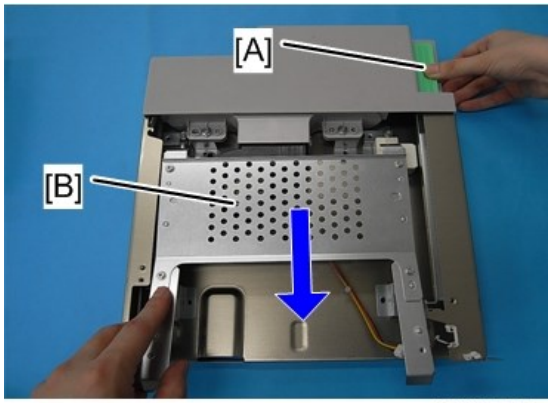
Side Fan

1. Remove the side fence (Side Fences (Front, Rear))
2. Remove the fan cover [A] (x2)



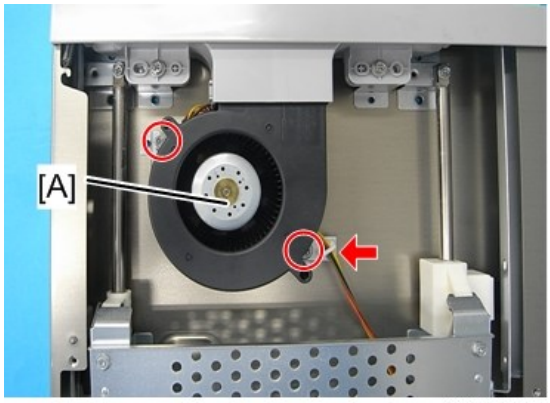
d777z0085

3. Hold down the lock lever [A] and lower the plate [B] in the direction of the arrow.



d777z0086

4. Remove the side fan [A] (x2, x1)



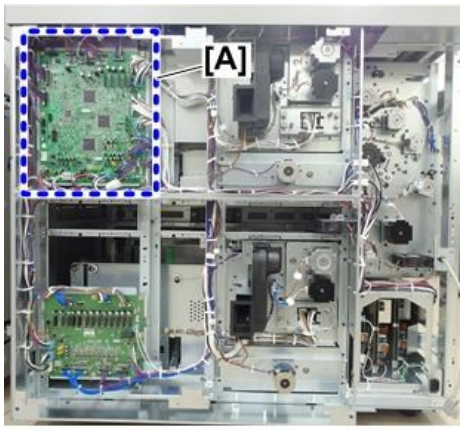
d777z0087

Rear Side

Main Board

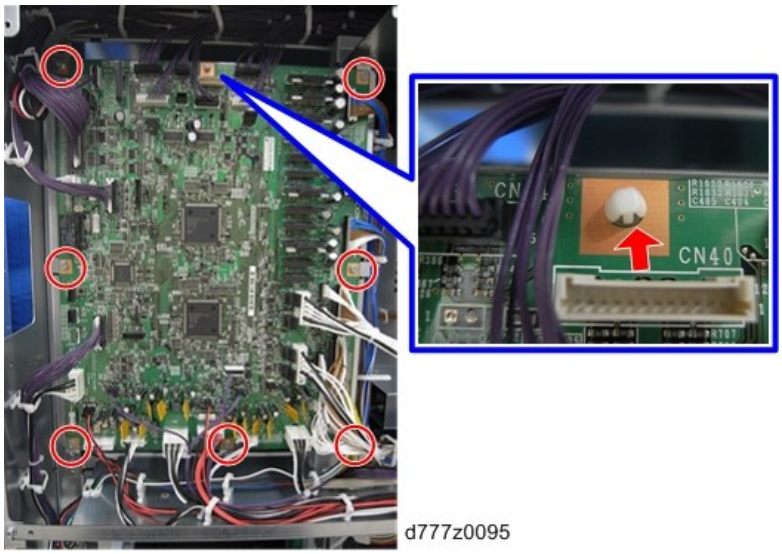
Note

Main Board [A] Location



m0b2d8023

1. Remove the rear right and left covers (Rear Right Cover,Rear Left Cover).
2. Remove the main board (x7, hook x1, all connectors and clamps)

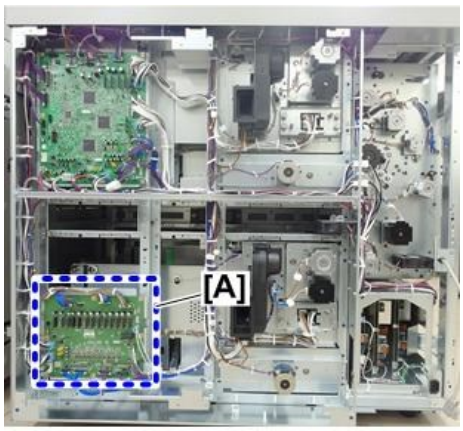


d777z0095

Motor Control Board

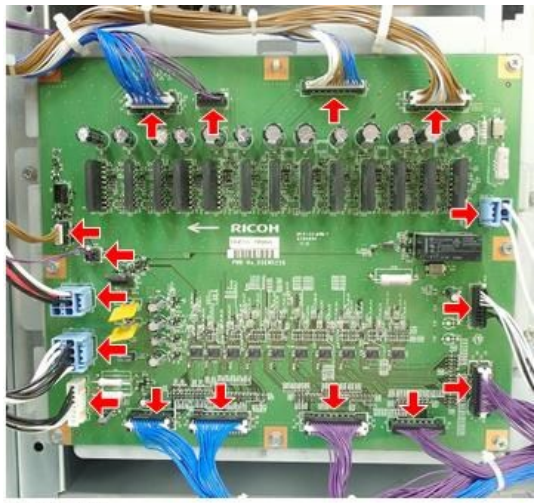
Note

The position of the motor control board [A]



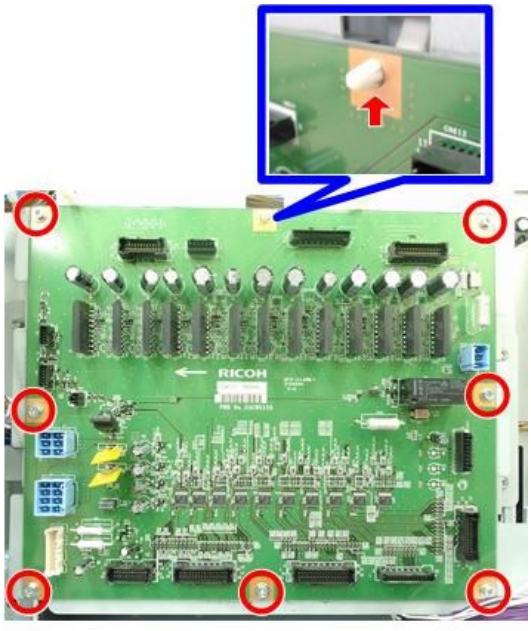
m0b2d8023a

1. Remove the rear right and left covers (Rear Right Cover,Rear Left Cover).
2. Disconnect the connectors of the motor control board.

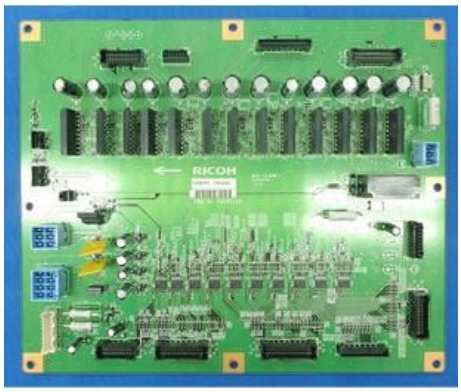


m0b2d8024

3. Remove the screws to detach the motor control board.



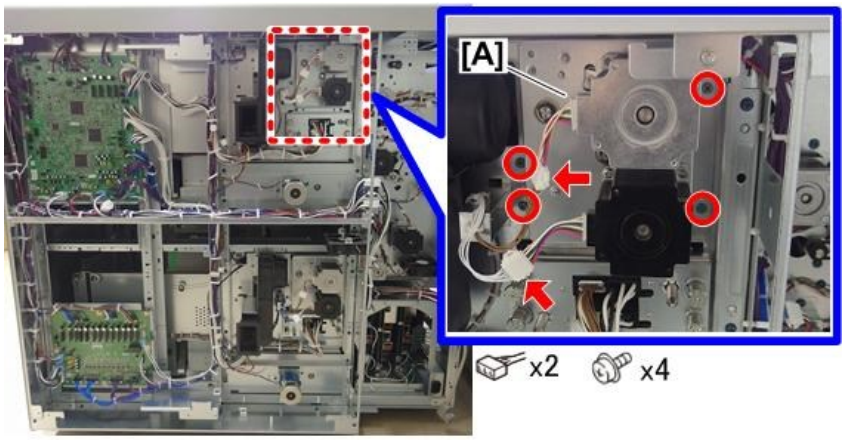
m0b2d8025



m0b2d8026

Tray 1 Pickup Belt Motor

1. Remove the rear right and left covers (Rear Right Cover,Rear Left Cover).
2. Remove the tray 1 grip motor bracket [A].



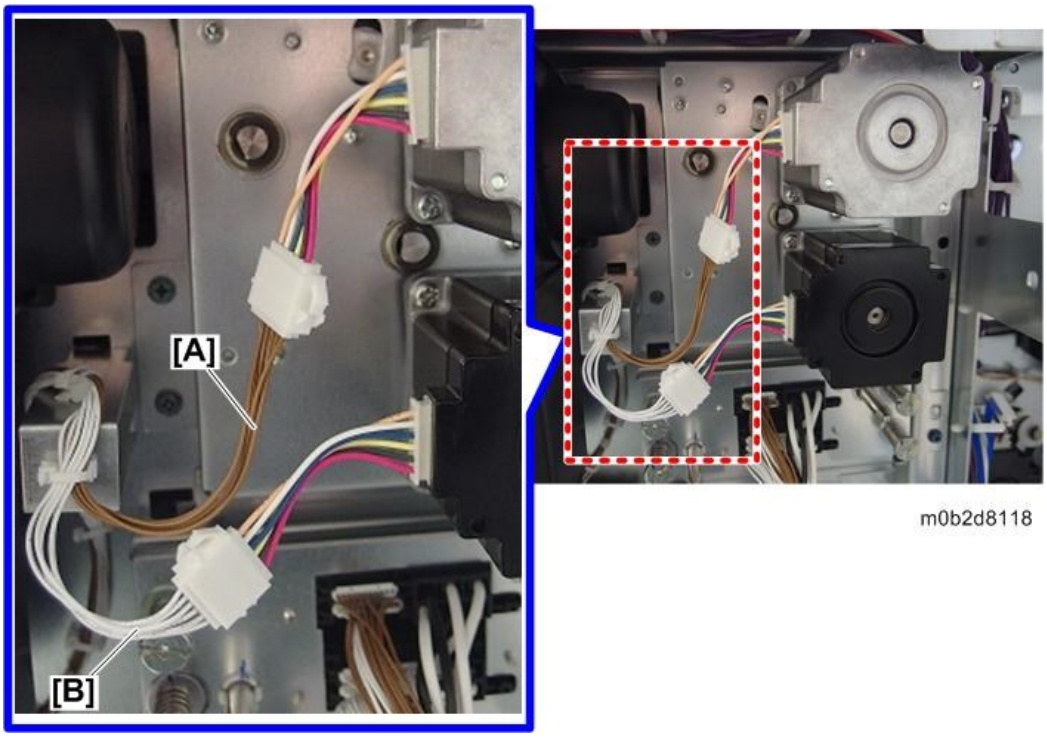
m0b2d8113

⚠CAUTION

The number of the socket pins of the tray 1 pickup belt motor and these of the tray 1 grip motor is the same. so it is possible that the harnesses are wrongly connected. Check the harness color so as not to make a wrong connection. If a wrong connection have been made, paper jam will occur.

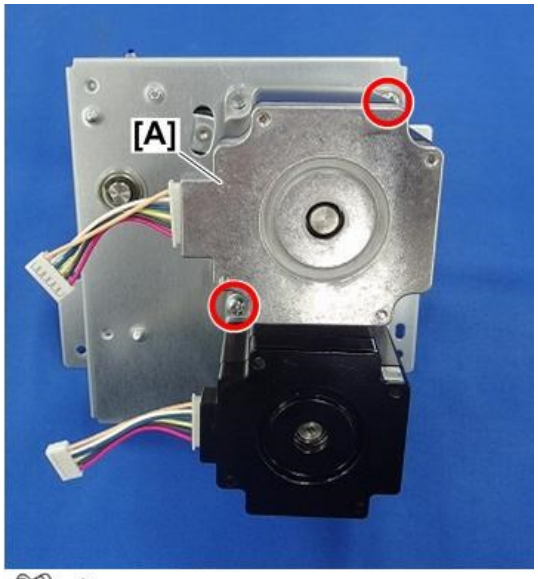
[A]: Tray 1 pickup belt motor harness (Brown)

[B]: Tray 1 grip motor harness (White)



m0b2d8118

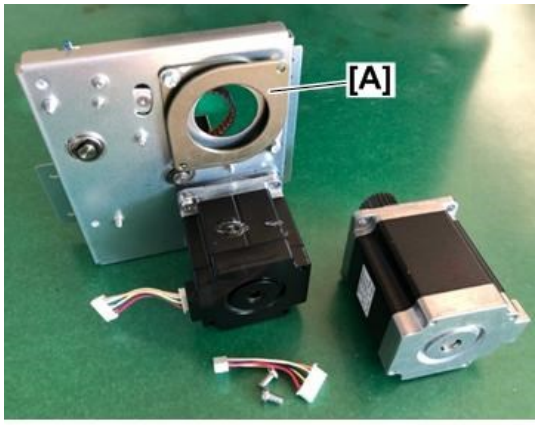
3. Remove the tray 1 pickup belt motor [A].



m0b2d8111

Important

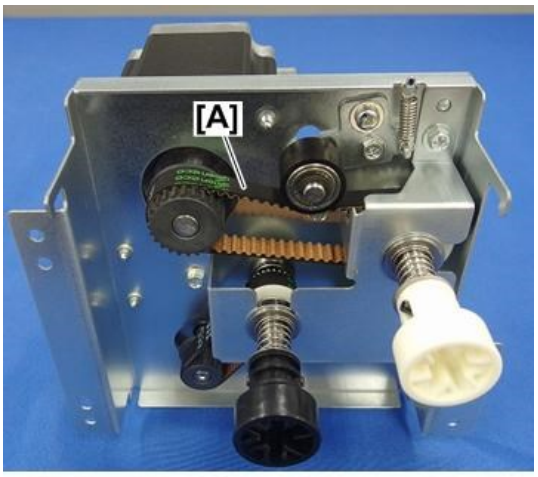
Do not remove the damper [A] between the motor and the bracket. This damper is factory installed and cannot be adjusted outside the factory.



m0b2d8112

Re-installation

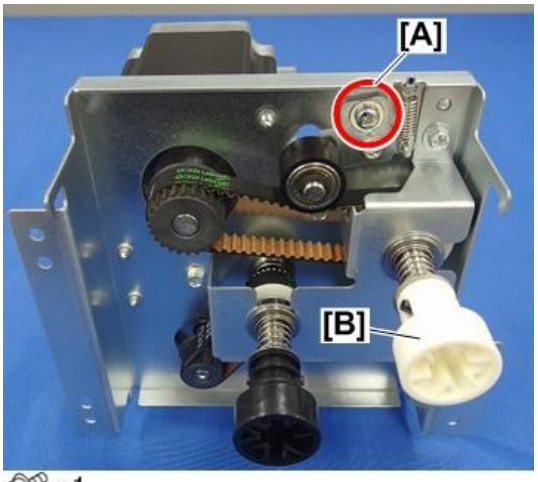
1. Make sure that the motor is correctly placed on the timing belt [A].



m0b2d8115

2. Loosen the screw [A] slightly to let the tensioner move, and then rotate the coupling shaft [B] two or three cycles.

3. Tighten the screw [A].

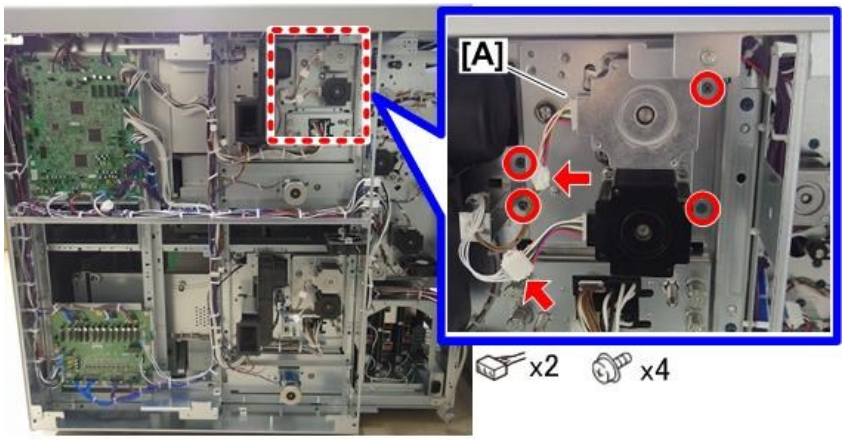


x1

m0b2d8116

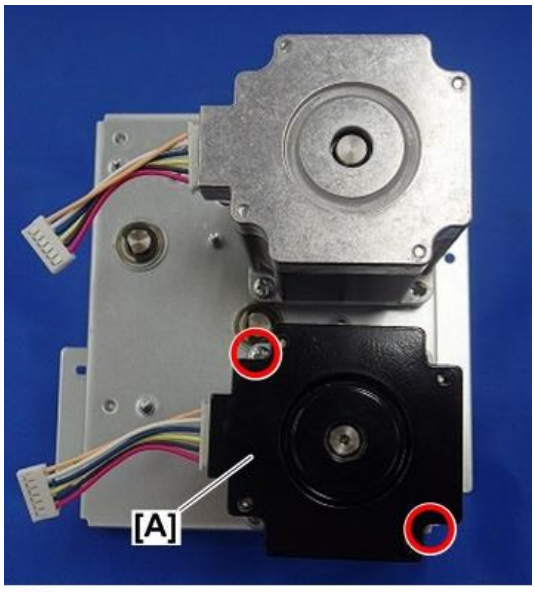
Tray 1 Grip Motor

1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).
2. Remove the tray 1 grip motor bracket [A].



m0b2d8113

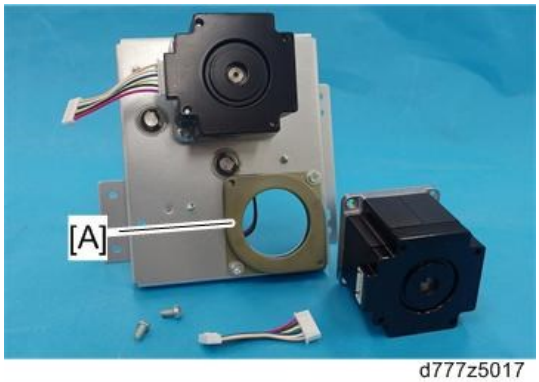
3. Remove the tray 1 grip motor [A].



m0b2d8117

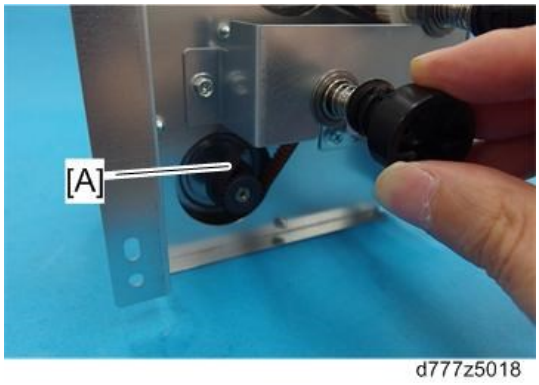
Important

Do not remove the damper [A] between the motor and the bracket. This damper is factory installed and cannot be adjusted outside the factory.



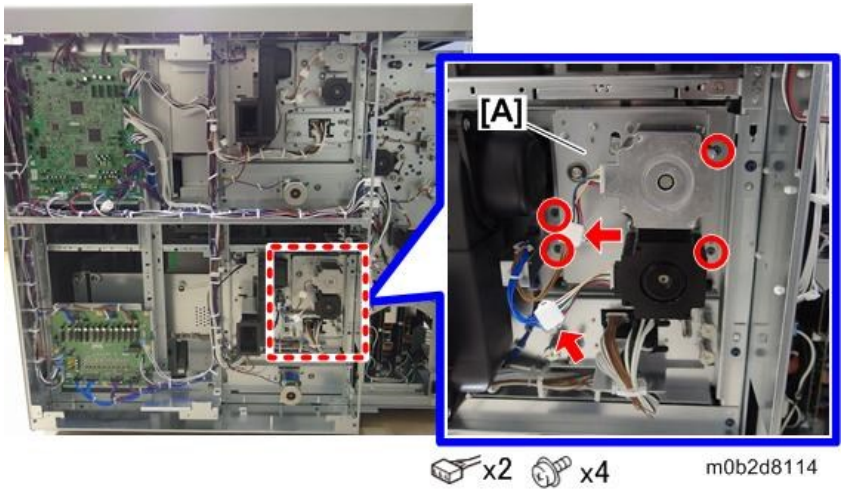
Re-installation

When installing the grip motor, make sure that the motor is correctly placed on the timing belt [A].

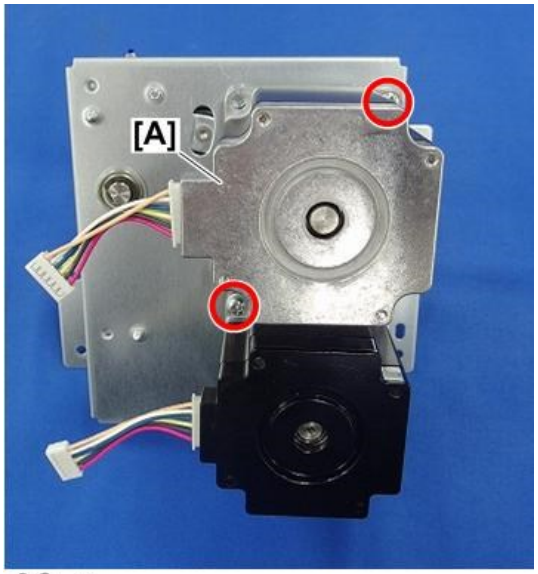


Tray 2 Pickup Belt Motor

1. Remove the rear right and left covers. (Rear Right Cover, Rear Left Cover)
2. Remove the tray 2 grip motor bracket [A].



3. Remove the tray 2 pickup belt motor [A].



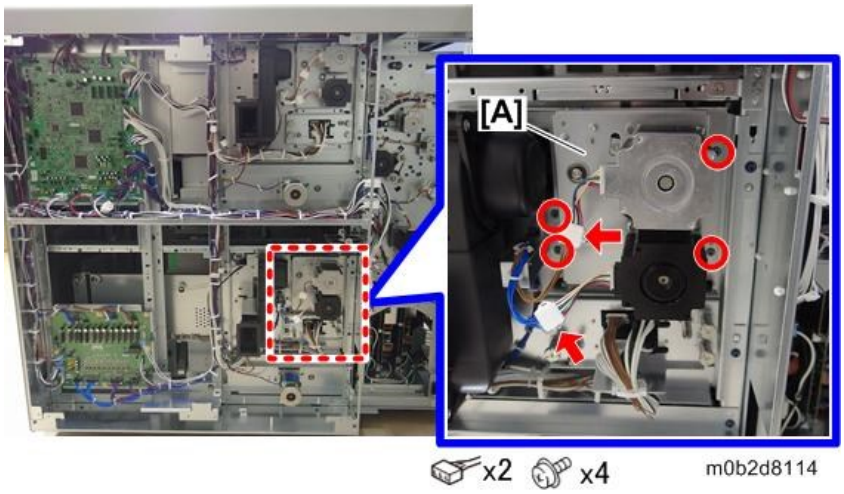
Note

- The procedure for removing and installing the tray 2 pickup belt motor is the same as for the tray 1 pickup belt motor.

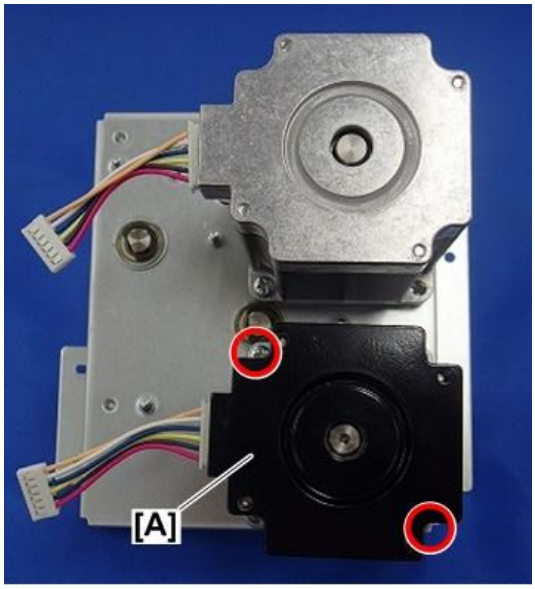
Tray 2 Grip Motor

1. Remove the rear right and left covers. (Rear Right Cover, Rear Left Cover)

2. Remove the tray 2 grip motor bracket [A].



3. Remove the tray 2 grip motor [A].



Note

- The procedure for removing and installing the tray 2 grip motor is the same as for the tray 1 grip motor.

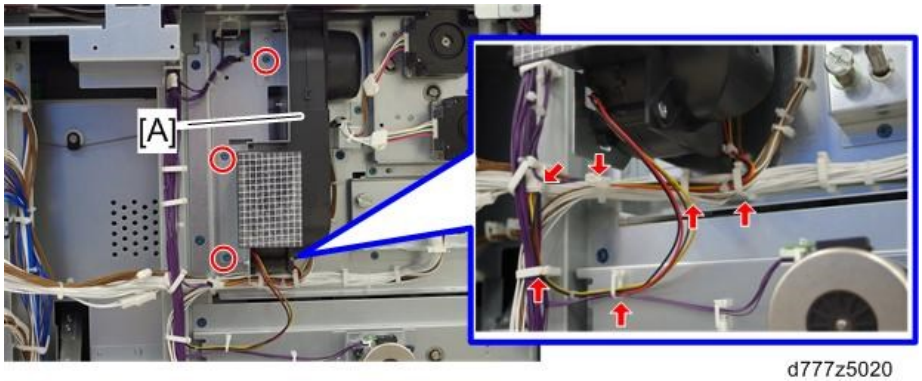
Suction Fan 1, 2 (Tray 1, 2)

Note

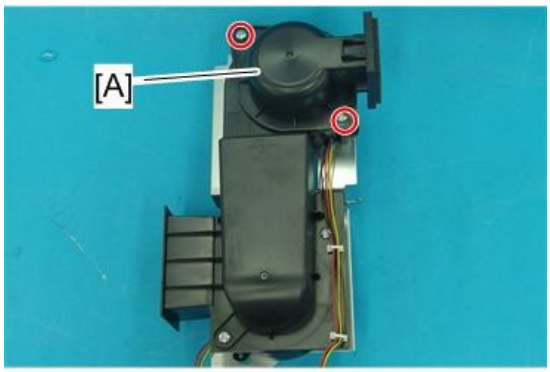
- Suction fans 1, 2 can be removed using the same procedure for each tray. The following is the procedure for replacing the fans in tray 1.

1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).

2. Remove the suction fan duct [A] (x3, x4, x2)

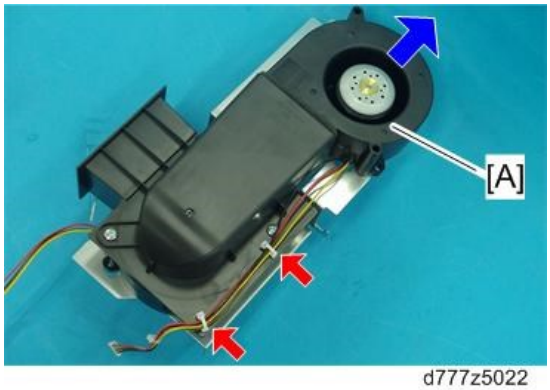


3. Remove the upper suction fan duct [A] (x2)



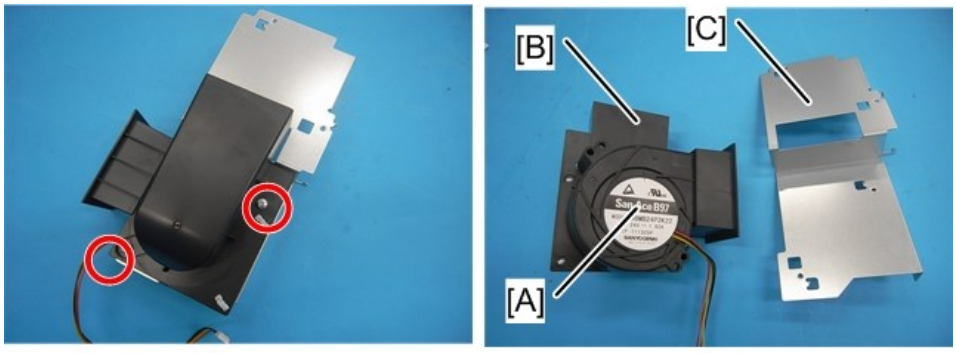
d777z5021

4. Remove suction fan 1 [A] (x2)



d777z5022

5. Separate suction fan 2 [A], the suction fan duct [B] and the bracket [C].



d777z0117

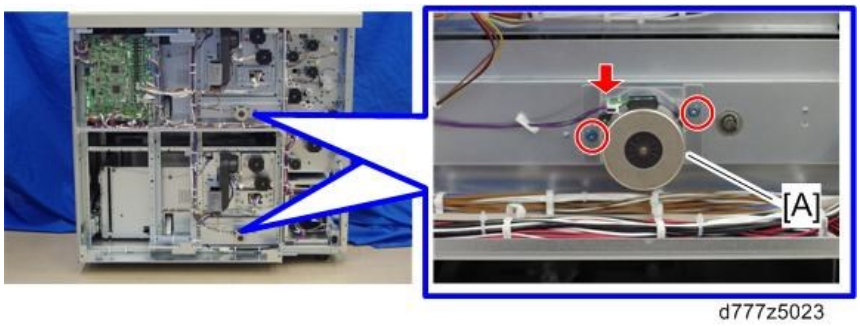
LCIT Lift Motor (Tray 1, 2)

Note

- The LCIT lift motor can be removed using the same procedure for each tray. The following is the procedure for replacing the motor in tray 1.

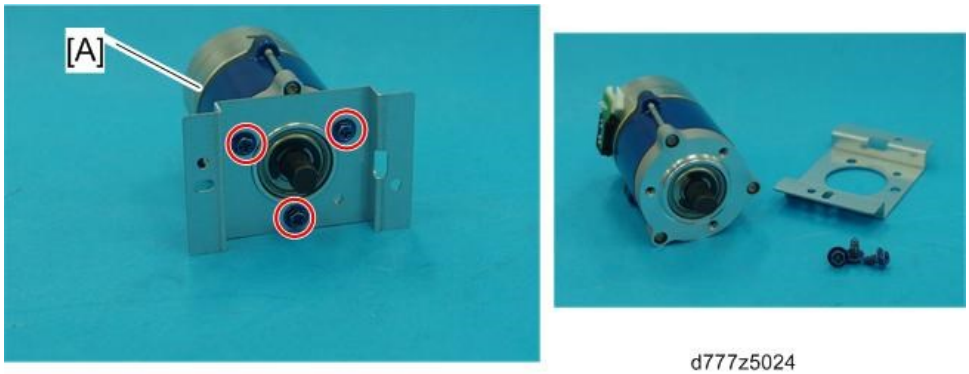
1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).

2. Remove the lift motor bracket [A] (x2, x1)



d777z5023

3. Remove the lift motor [A] (x3)



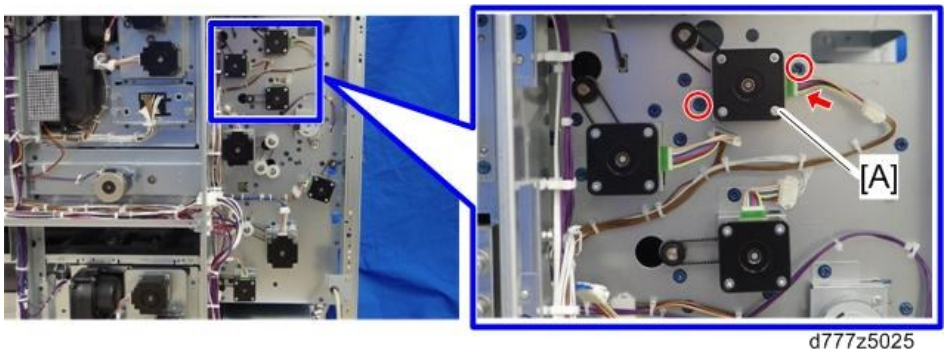
d777z5024

Bypass Transport Motor 2

Note

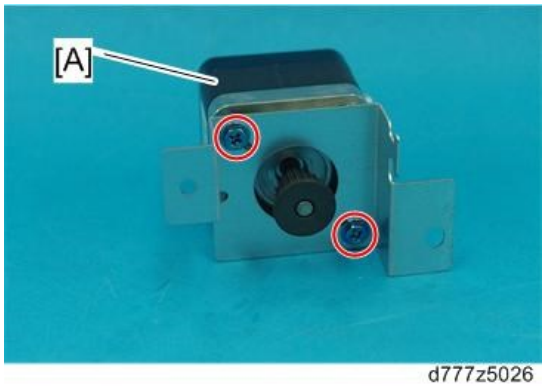
- Bypass transport motor 2 is installed when the optional bypass unit is installed.

1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).
2. Remove the bypass transport motor 2 bracket [A] (x2, x1)



d777z5025

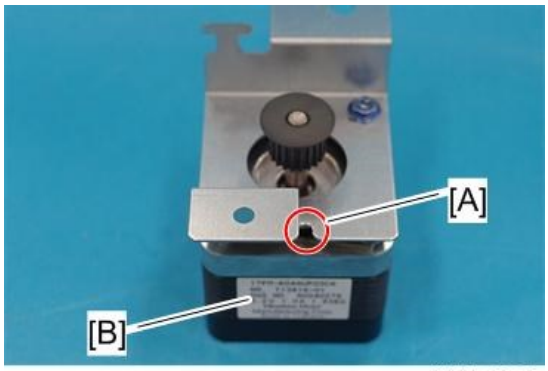
3. Remove bypass transport motor 2 [A] (x2)



d777z5026

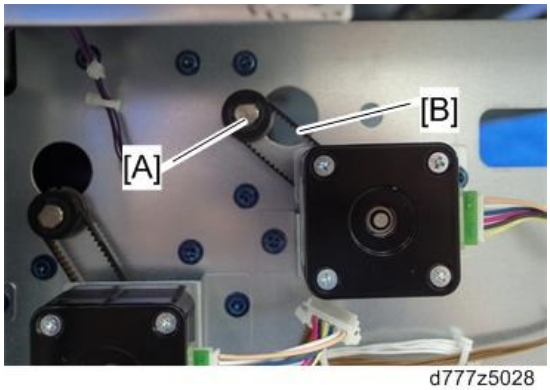
Re-installation

1. When attaching the bracket to the motor, position the bracket so that the opening in the bracket [A] faces the label [B].



d777z5027

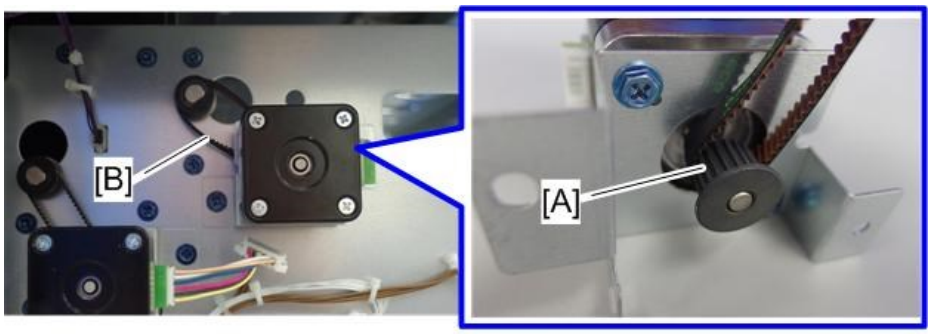
2. When attaching the motor bracket, turn the roller [A] to make sure that the timing belt [B] is correctly installed.



d777z5028

Note

- If the timing belt is not correctly installed on the motor gear [A], the timing belt [B] may be too loose.



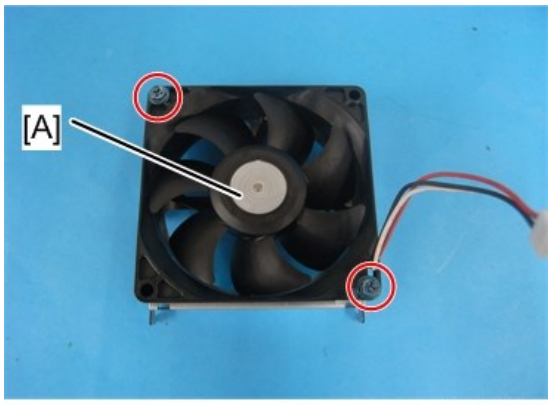
d777z5029

Transport Motor Cooling Fan

1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).
2. Remove the transport motor cooling fan [A] with the bracket (x2,x2,x1).

d194z0286

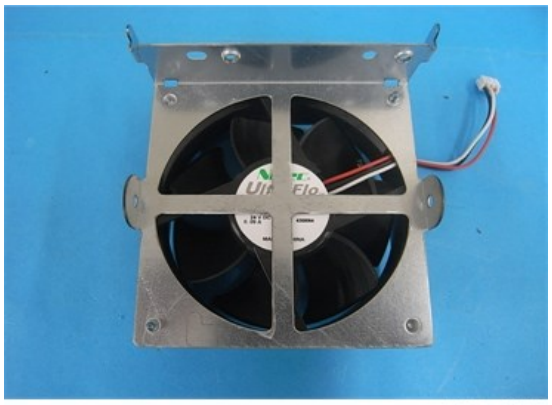
3. Remove the transport motor cooling fan [A] (x2)



d194z0287

Re-installation

Install the transport motor cooling fan so that its label faces as shown below.



d194z0288

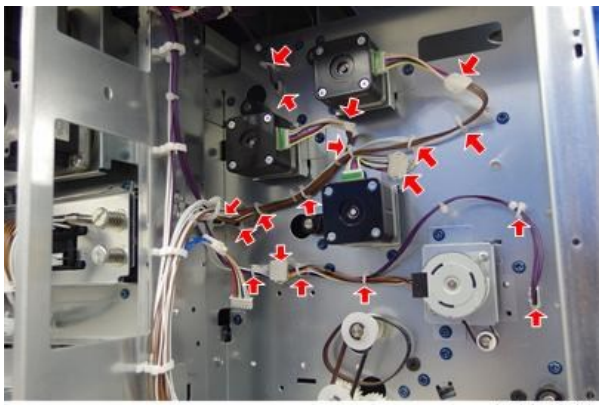
Vertical Feed Unit

Note

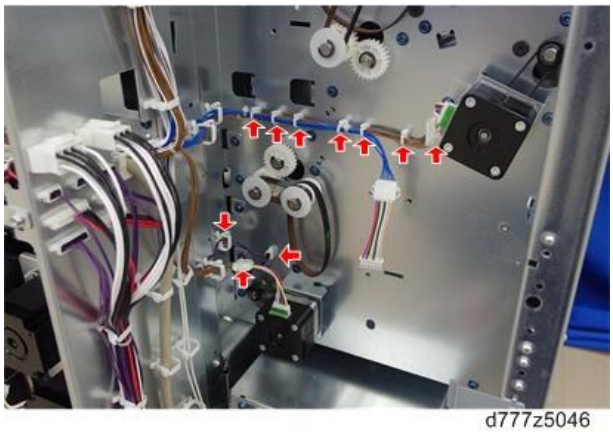
- When the LCIT is not docked to the main unit, do not pull out all the trays in the LCIT, because it could fall over.

Vertical Feed Unit

1. Remove the upper inner cover (Upper Inner Cover)
2. Remove the lower inner cover (Lower Inner Cover)
3. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).
4. Remove each vertical transport unit cooling fan bracket. (Vertical Transport Unit Cooling Fan)
5. Remove the vertical transport exit motor bracket (Vertical Transport Exit Motor)
6. Remove the tray 2 vertical transport motor 2 bracket (Tray 2 Vertical Transport Motor 2)
7. Disconnect all the harnesses that are connected to the vertical feed unit (x all, x all).



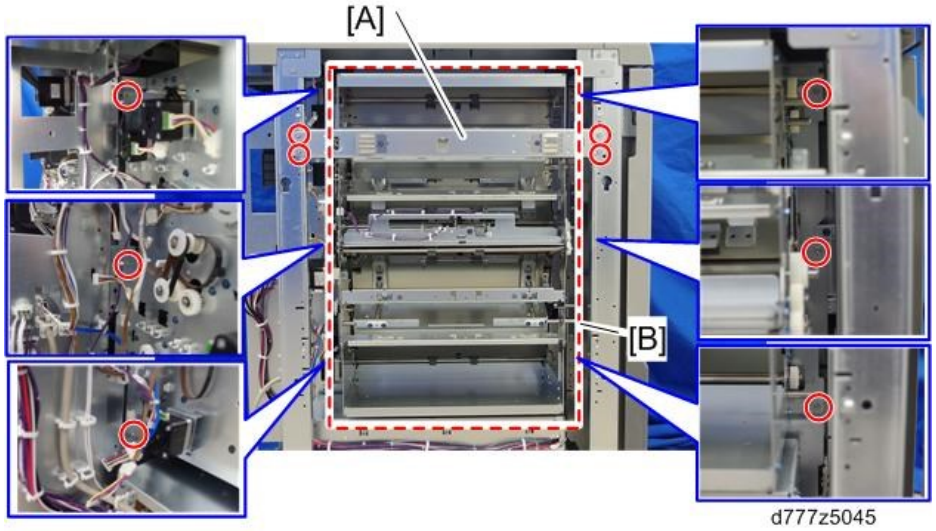
d777z5044



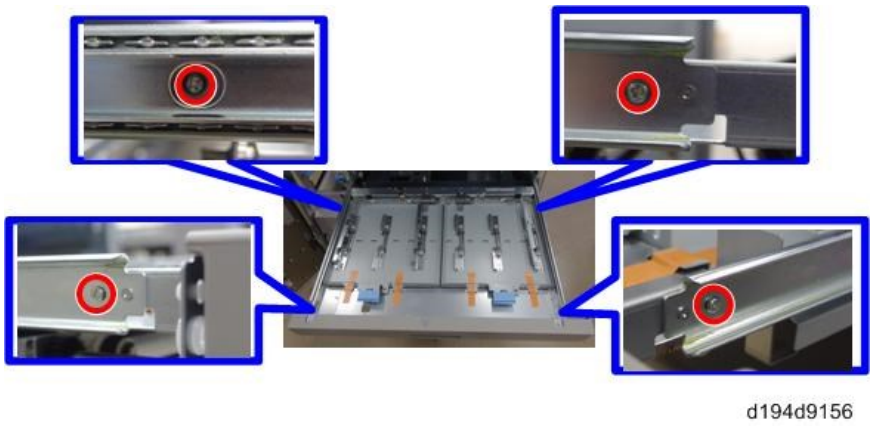
d777z5046

8. Remove the stay [A] from the left side (x4).

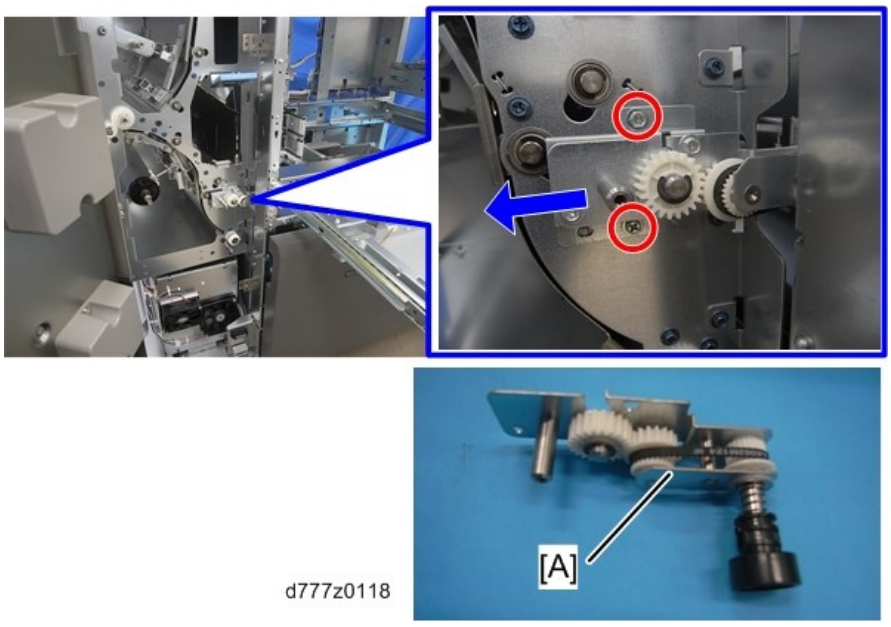
9. Remove the six screws that secure the vertical feed unit [B] to the vacuum feed LCIT (x6).



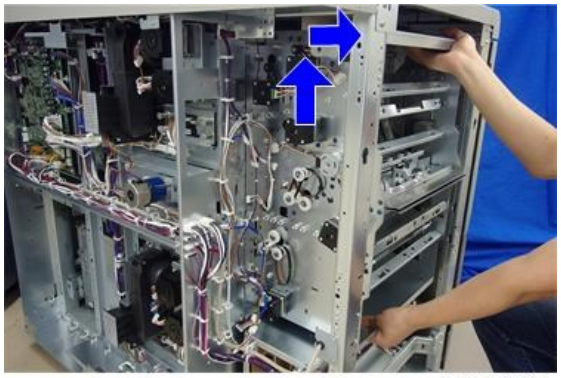
10. If linked to the vacuum feed LCIT, remove the horizontal feed unit (x4).



11. If linked to the vacuum feed LCIT, remove the paper jam processing lever [A] (x2).

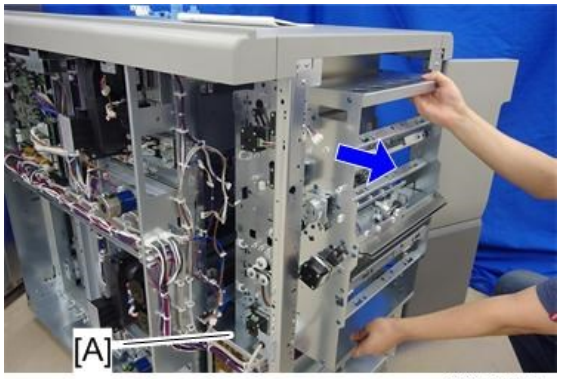


12. Use both hands to support the vertical feed unit, raise it slightly and pull it towards you.



d777z5047

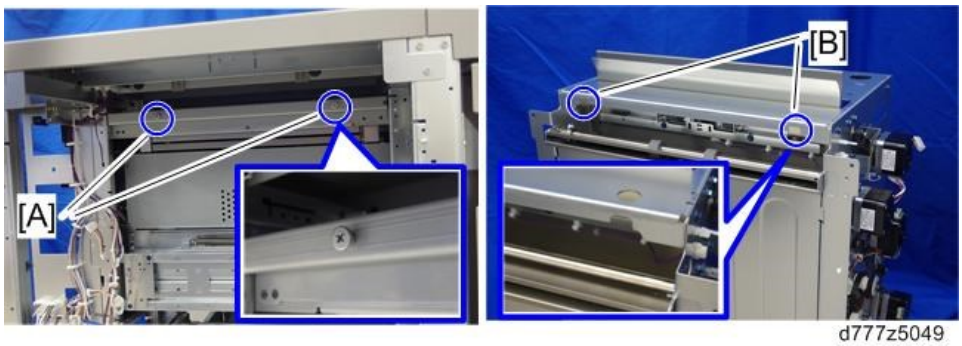
13. Place the vertical feed unit on the PSU box [A] and pull it out gently.



d777z5048

Re-installation

When installing the vertical feed unit, place the notches [B] on the right side of the frame of the vertical feed unit on the two shoulder screws [A] on the left side of the LCIT.

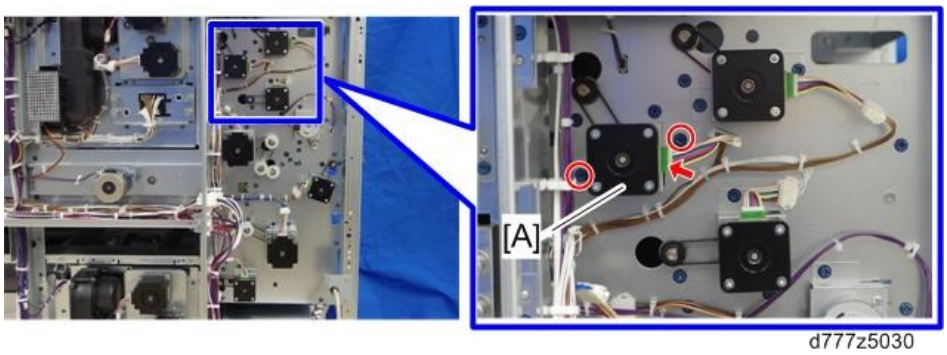


d777z5049

Tray 1 Vertical Transport Motor 1

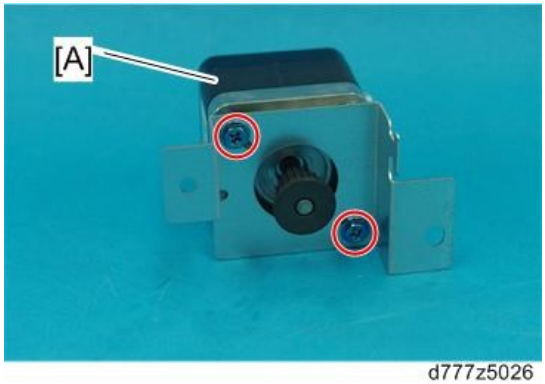
1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).

2. Remove the tray 1 vertical transport motor 1 bracket [A] (x2, x1)



d777z5030

3. Remove tray 1 vertical transport motor 1 [A] (x2)



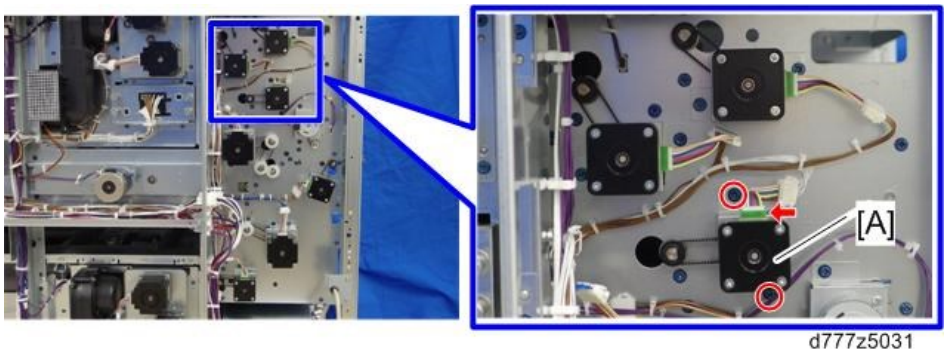
d777z5026

Note

- When installing the motor, refer to re-installation for bypass transport motor 2 (Bypass Transport Motor 2).

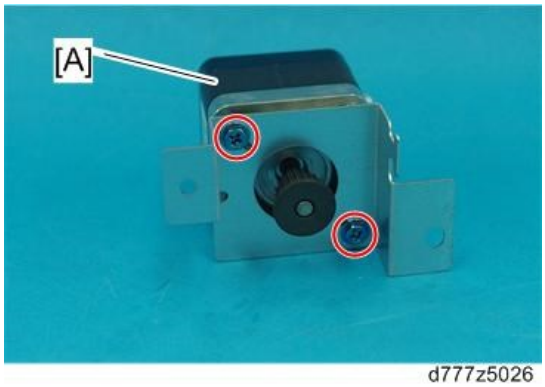
Tray 1 Vertical Transport Motor 2

1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).
2. Remove the tray 1 vertical transport motor 2 bracket [A] (x2, x1)



d777z5031

3. Remove tray 1 vertical transport motor 2 [A] (x2)



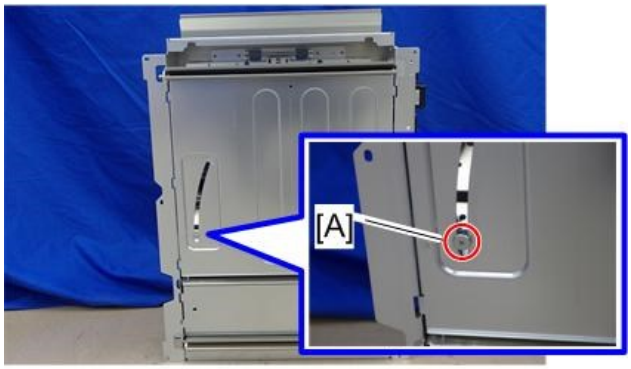
d777z5026

Note

- When installing the motor, refer to re-installation for bypass transport motor 2 (Bypass Transport Motor 2).

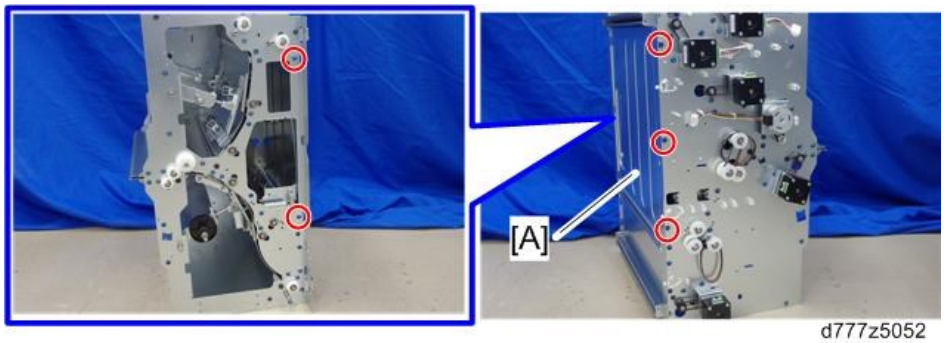
Tray 1 Transport Sensor

1. Remove the vertical feed unit (Vertical Feed Unit)
2. Remove the shoulder screw [A]



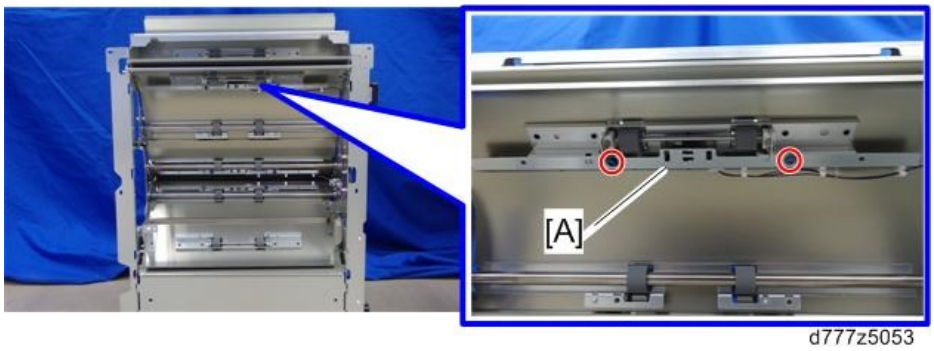
d777z5051

3. Remove the right cover [A] from the vertical feed unit (x5).

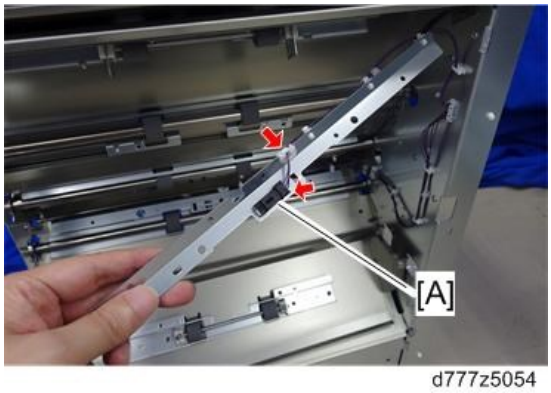


d777z5052

4. Remove the tray 1 transport sensor bracket [A] (x2)

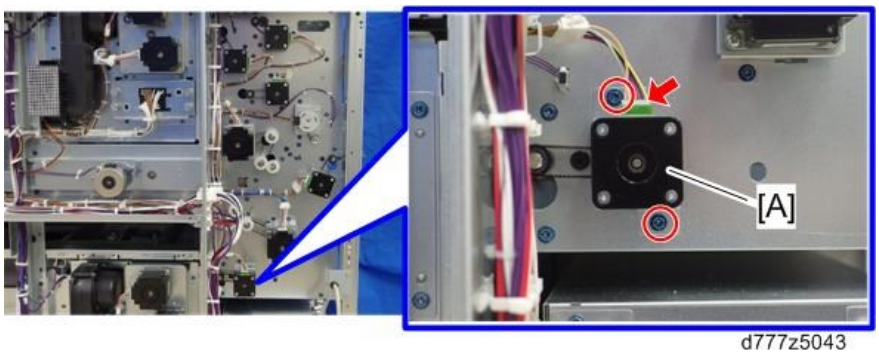


5. Remove the tray 1 transport sensor [A] (x1, x1)

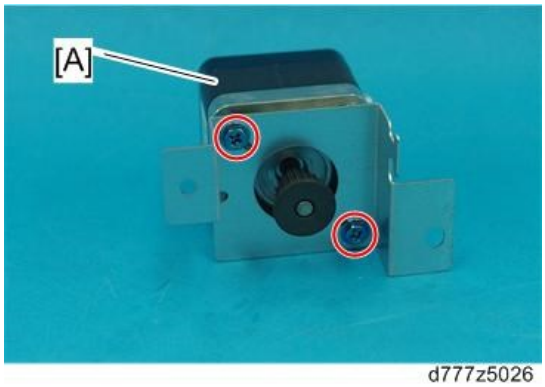


Tray 2 Vertical Transport Motor 1

1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).
2. Remove the tray 2 vertical transport motor 1 bracket [A] (x2, x1)



3. Remove tray 2 vertical transport motor 1 [A] (x2)



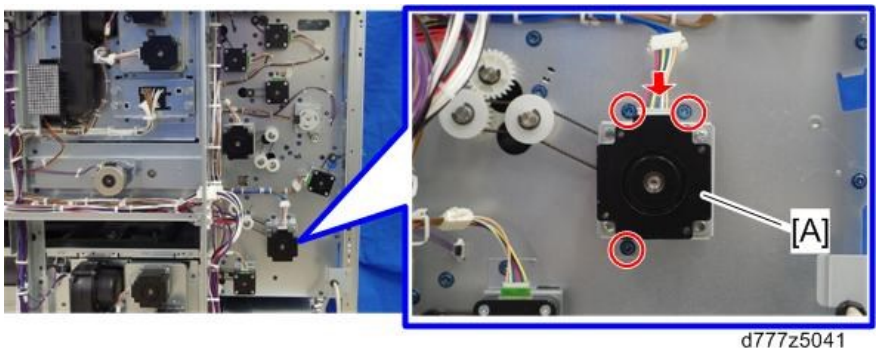
Note

- When installing the motor, refer to re-installation for bypass transport motor 2 (Bypass Transport Motor 2).

Tray 2 Vertical Transport Motor 2

1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).

2. Remove the tray 2 vertical transport motor 2 bracket [A] (x3, x1)



3. Remove tray 2 vertical transport motor 2 [A] (x2)

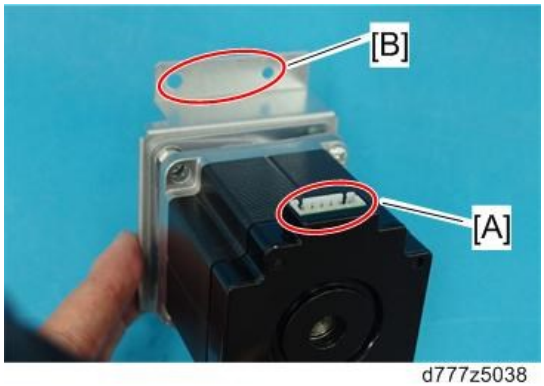
Important

- Do not remove the damper [B] between the motor and the bracket. This damper is factory installed and cannot be adjusted outside the factory.

Re-installation

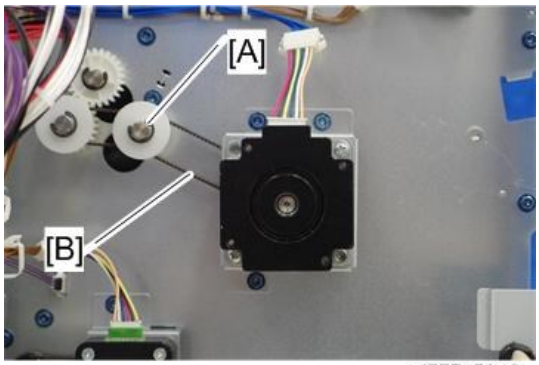
1. When attaching the bracket to the motor, install it so that the connector openings [A] face the two

screw holes [B].



d777z5038

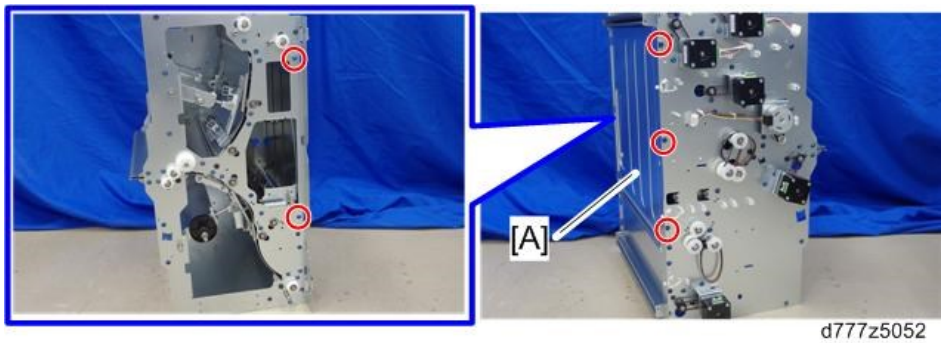
2. When attaching the motor bracket, turn the roller [A] to make sure that the timing belt [B] is correctly installed.



d777z5042

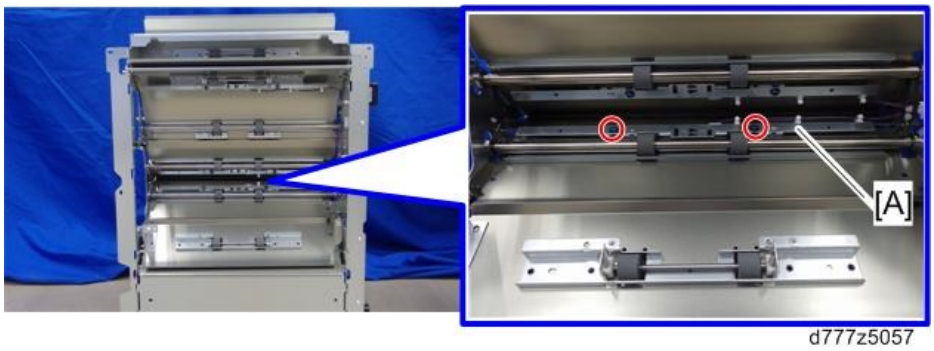
Tray 2 Vertical Transport Sensor

1. Remove the vertical feed unit (Vertical Feed Unit)
2. Remove the right cover [A] from the vertical feed unit (x5).

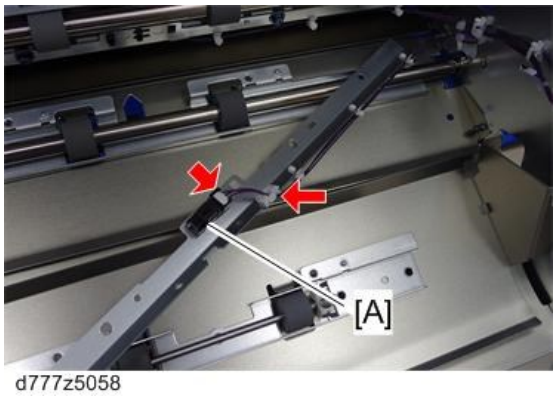


d777z5052

3. Remove the tray 2 vertical transport sensor bracket [A] (x2)



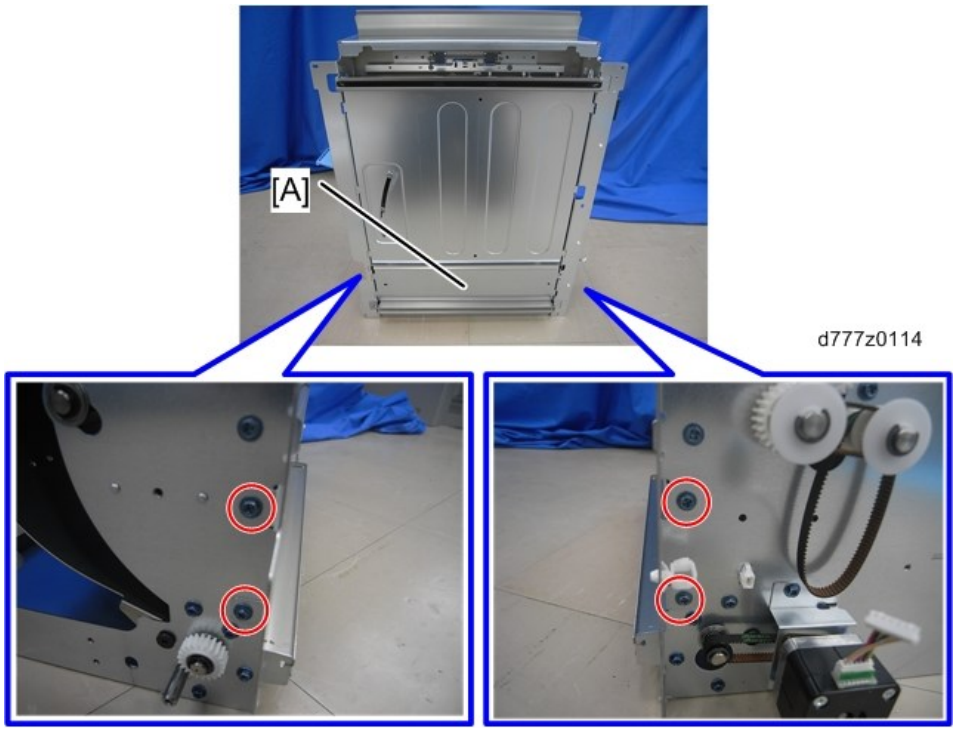
4. Remove the tray 2 vertical transport sensor [A] (x1, x1)



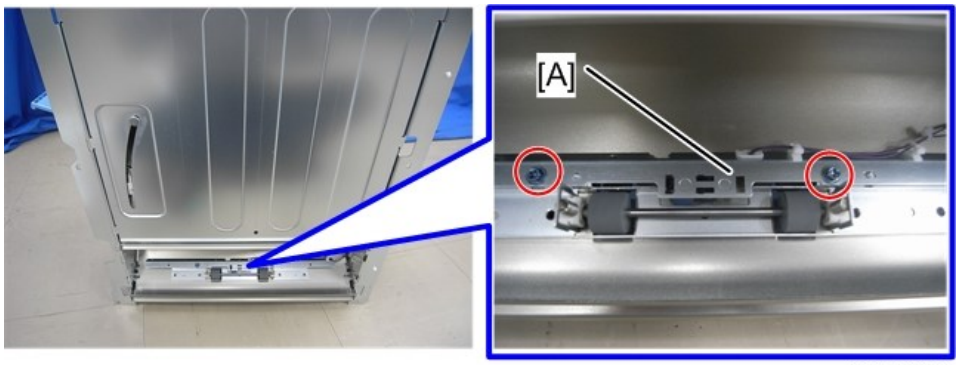
Tray 2 Transport Sensor

1. Remove the vertical feed unit (Vertical Feed Unit)

2. Remove the lower cover from the vertical transport unit [A] (x4).

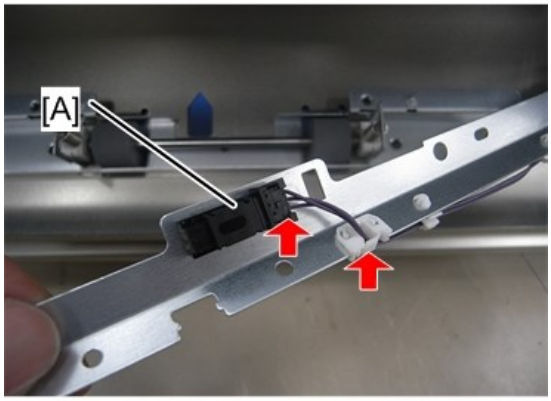


3. Remove the bracket [A] (x4)



d777z0115

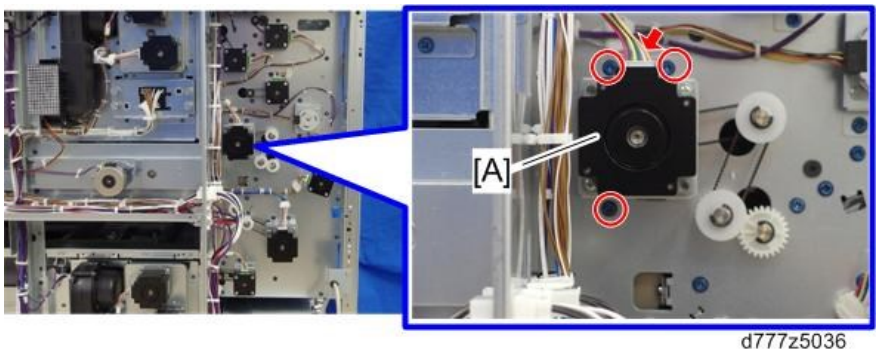
4. Remove the tray 2 transport sensor [A] (x1, x1)



d777z0116

Vertical Transport Exit Motor

1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).
2. Remove the vertical transport exit motor bracket [A] (x3, x1)



d777z5036

3. Remove the vertical transport exit motor [A] (x2)

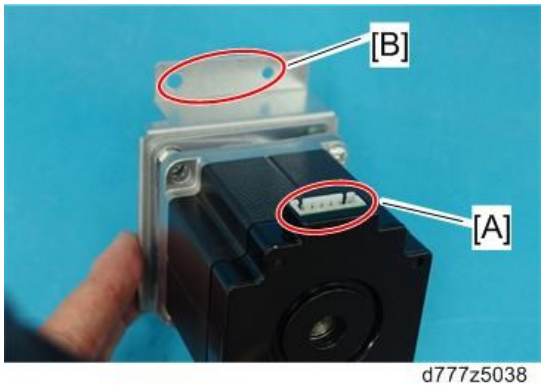
Important

- Do not remove the damper [B] between the motor and the bracket. This damper is factory installed and cannot be adjusted outside the factory.

d777z5037

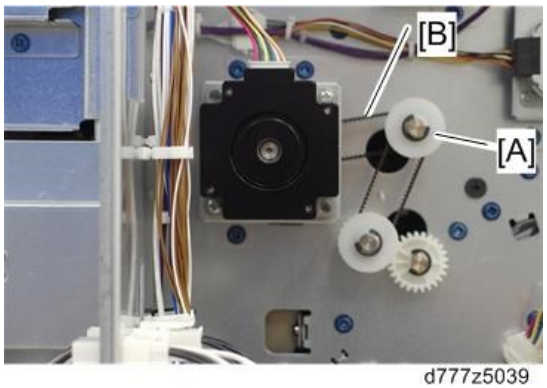
Re-installation

1. When attaching the bracket to the motor, install it so that the connector openings [A] face the two screw holes [B].



d777z5038

2. When attaching the motor bracket, turn the roller [A] to make sure that the timing belt [B] is correctly installed.



d777z5039

Bypass Transport Sensor 2

1. Remove the vertical feed unit (Vertical Feed Unit)

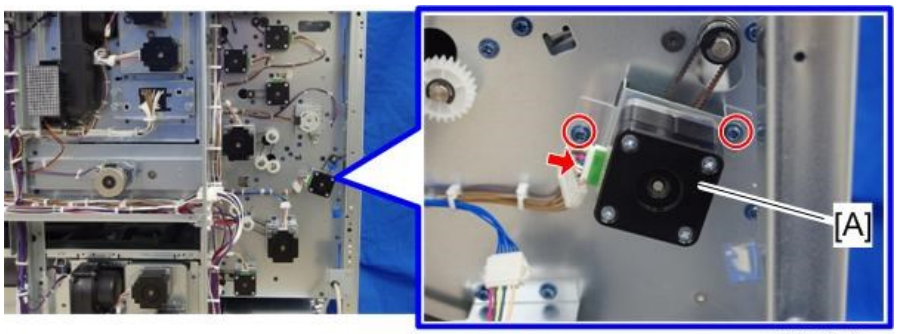
2. Remove the bypass transport sensor 2 bracket [A] (x2)

d777z5050

3. Remove bypass transport sensor 2 [A] (x1, x1)

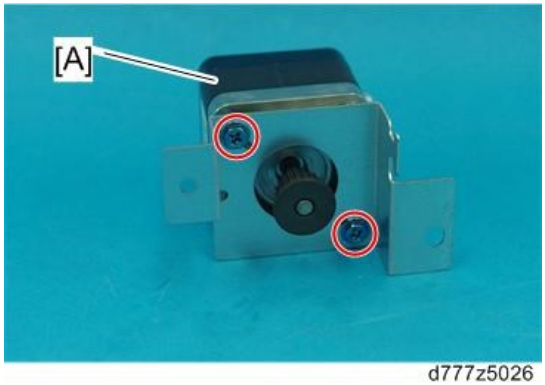
LCIT Exit Motor

1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).
2. Remove the LCIT exit motor bracket [A] (x2, x1)



d777z5040

3. Remove the LCIT exit motor [A] (x2)



d777z5026

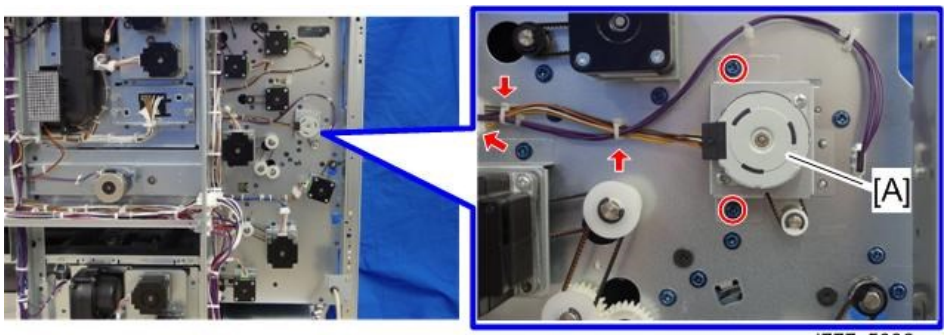
Note

- When installing the motor, refer to re-installation for bypass transport motor 2 (Bypass Transport Motor 2).

LCIT Exit Roller Contact Motor

1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).

2. Remove the LCIT exit roller contact motor bracket [A] (x2, x1)



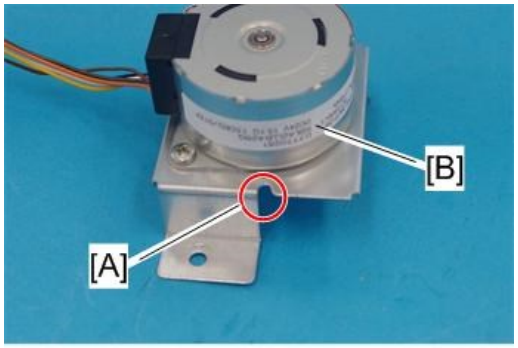
d777z5032

3. Remove the LCIT exit roller contact motor [A] (x2)

d777z5033

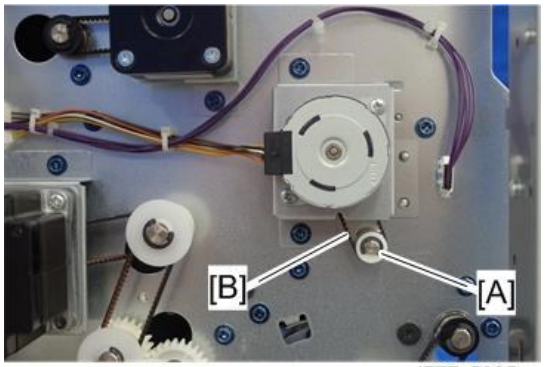
Re-installation

1. When attaching the bracket to the motor, position the bracket so that the opening in the bracket [A] faces the label [B].



d777z5034

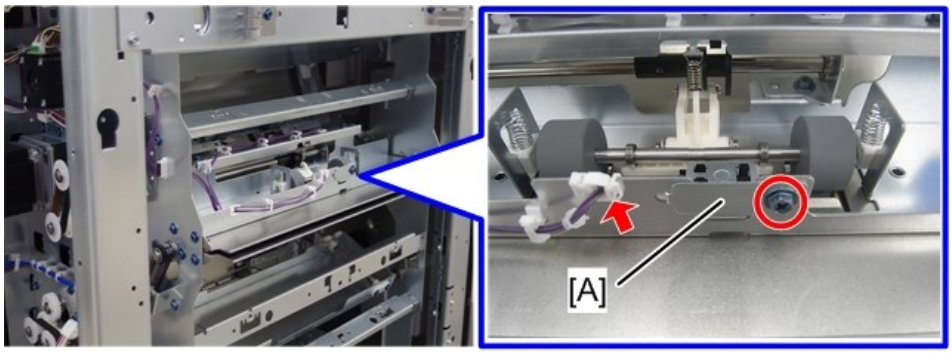
2. When attaching the motor bracket, turn the roller [A] to make sure that the timing belt [B] is correctly installed.



d777z5035

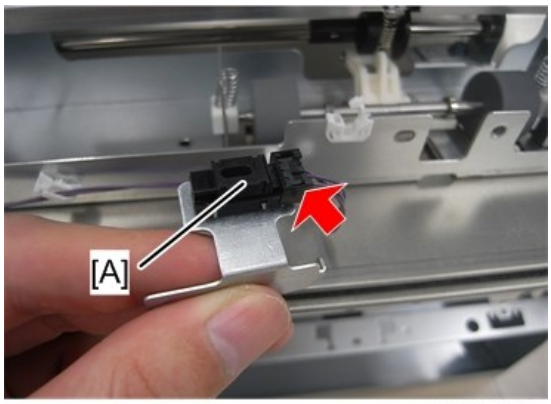
LCIT Exit Sensor

1. Remove the bracket [A] (x1,x1)



d777z0108

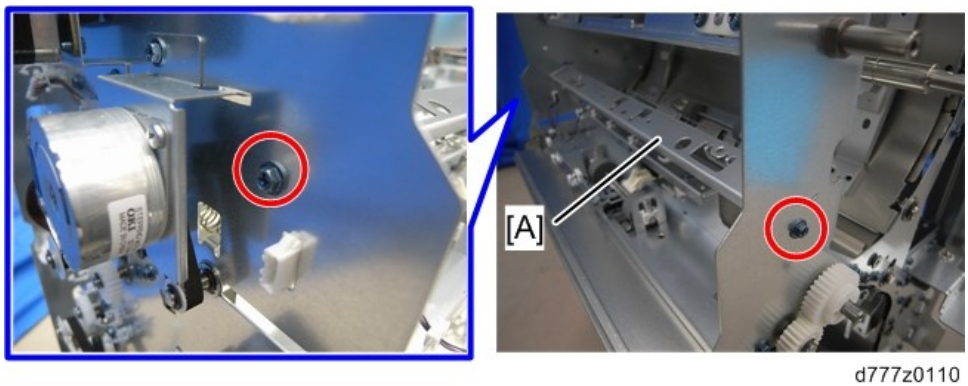
2. Remove the LCIT exit sensor [A] (x1)



d777z0109

LCIT Exit Roller Contact Sensor

1. Remove the stay [A] from the vertical feed unit (x2).

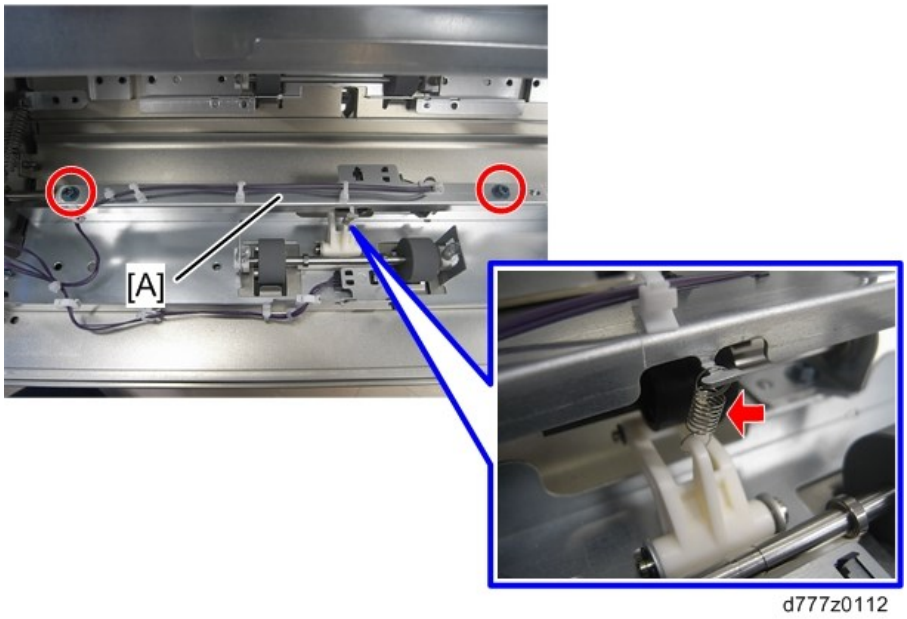


d777z0110

2. Remove the bracket [A] (x1, x1)

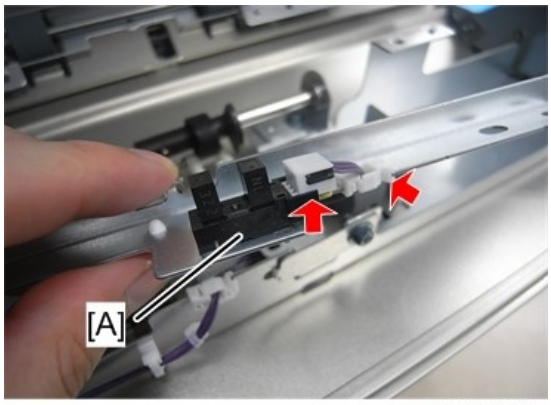
Note

- The top stay is in the way. Use a small screwdriver to remove it.



d777z0112

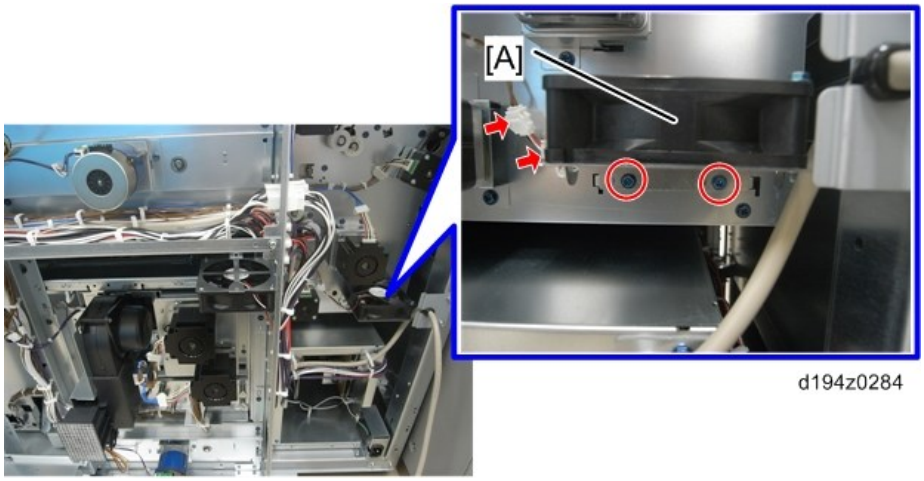
3. Remove the LCIT exit roller contact sensor [A] (x1,x1)



d777z0113

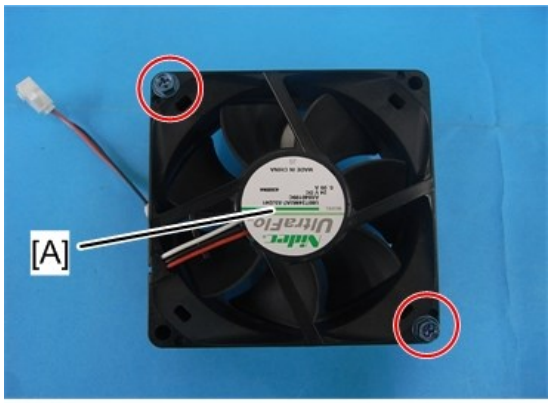
Vertical Transport Unit Cooling Fan

1. Remove the rear right and rear left covers (Rear Right Cover, Rear Left Cover).
2. Remove the vertical transport unit cooling fan [A] with the bracket (x2,x1,x1).



d194z0284

3. Remove the vertical transport unit cooling fan [A] (x2)



d194z0285

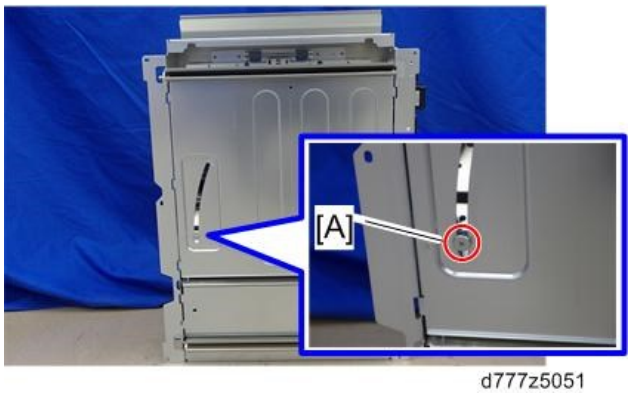
Vertical Transport Unit Cooling Fan Re-installation

Install the cooling fan so that its label faces up

d194z0289

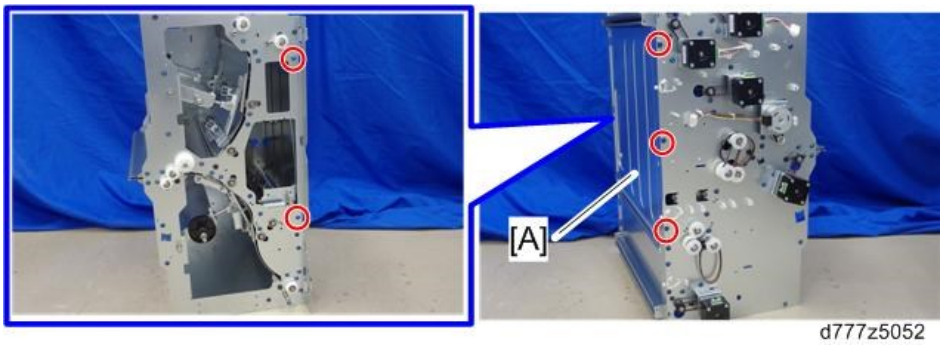
Vertical Transport Entrance Contact Motor

1. Remove the vertical feed unit (Vertical Feed Unit)
2. Remove the shoulder screw [A] on the right side of the vertical feed unit.

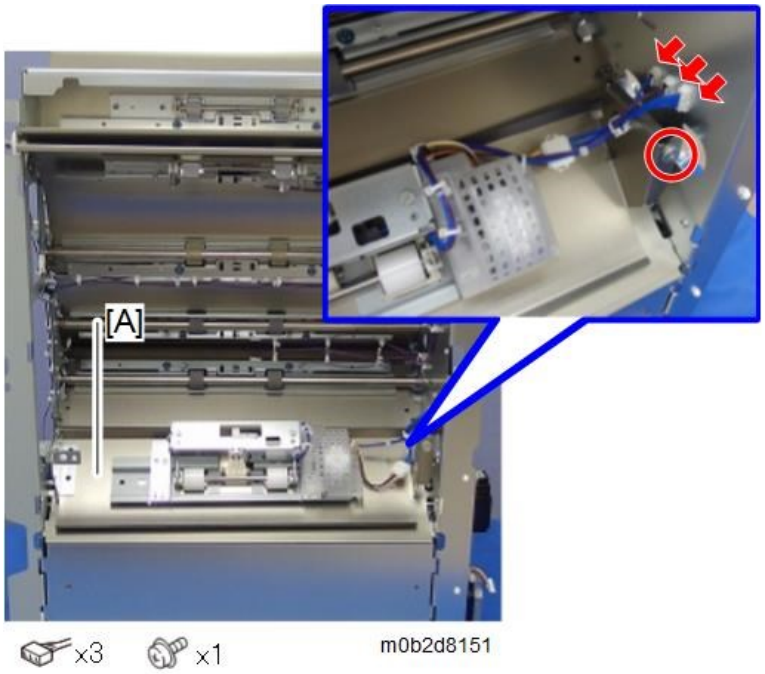


d777z5051

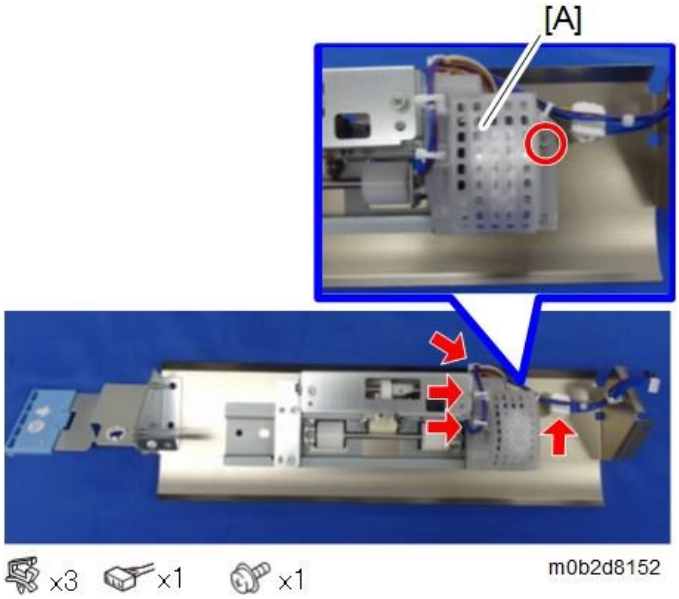
3. Remove the right cover [A] from the vertical feed unit (x5).



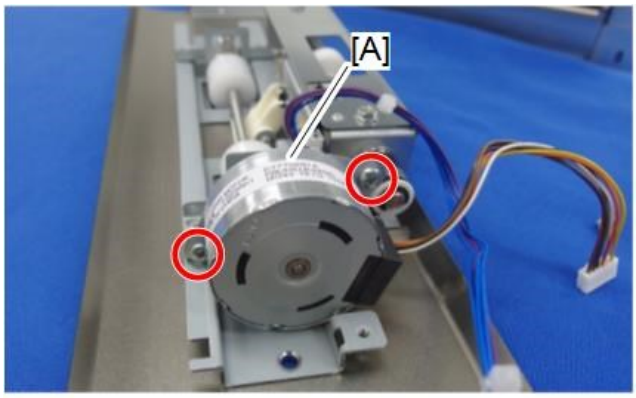
4. Remove the vertical transport entrance contact unit [A].



5. Release the clamps and connectors, and remove the motor cover [A].

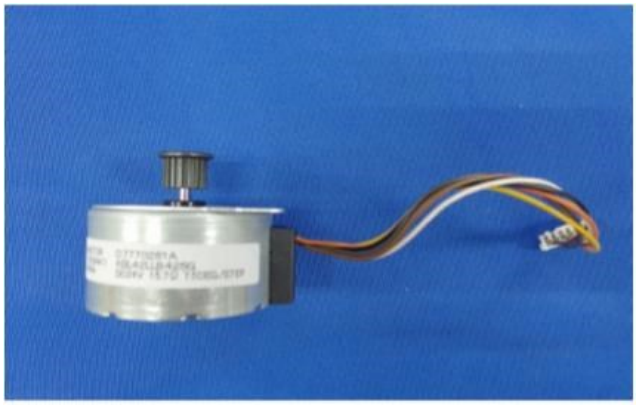


6. Remove the vertical transport entrance contact motor [A].



x2

m0b2d8153

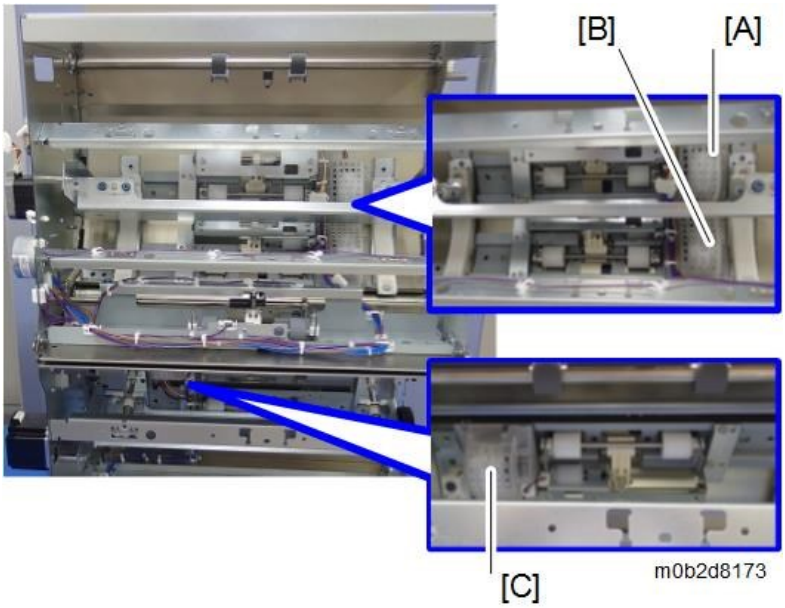


m0b2d8154

Tray 2 Vertical Transport Exit Contact Motor

Note

The position of the contact motors on the left side of the vertical transport unit is shown below.



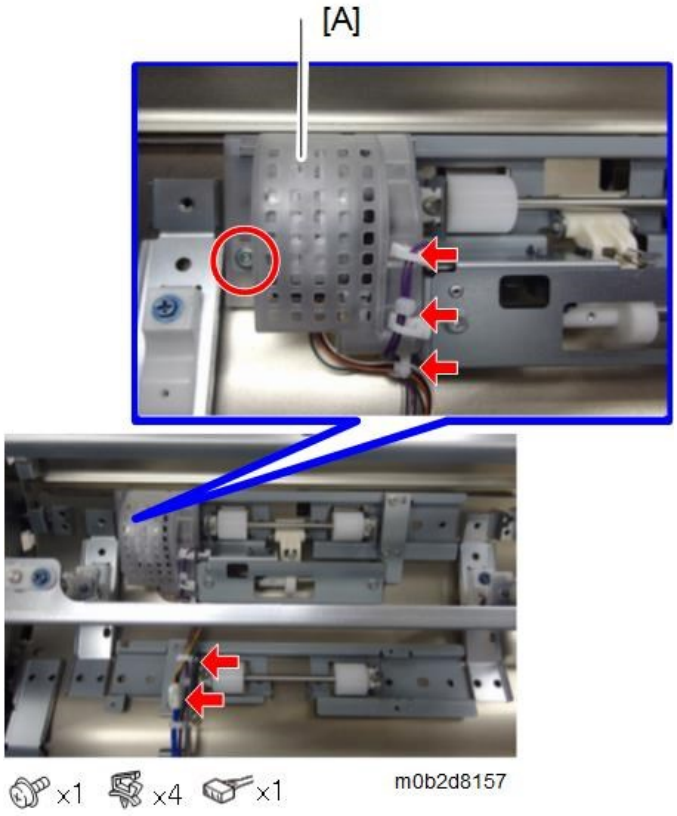
m0b2d8173

[A]: Tray 1 Vertical Transport Contact Motor

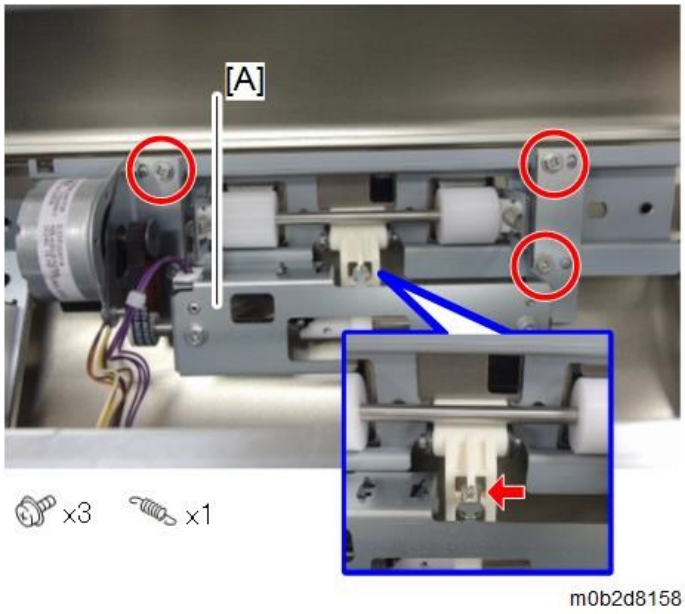
[B]: Tray 1 Vertical Transport Exit Contact Motor

[C]: Tray 2 Vertical Transport Exit Contact Motor

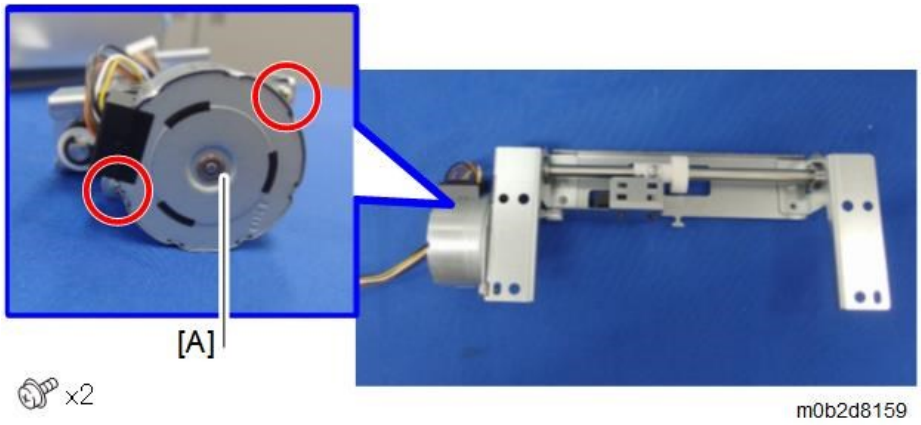
1. Remove the vertical feed unit (Vertical Feed Unit)
2. Release the clamps and connector, and remove the motor cover [A].

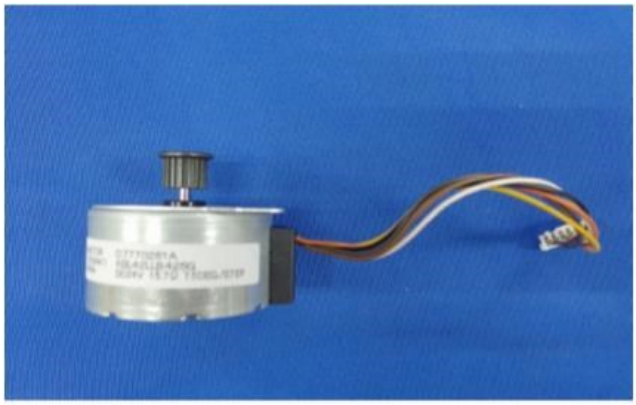


3. Remove the spring and the motor bracket [A].



4. Remove the tray 2 vertical transport exit contact motor [A].

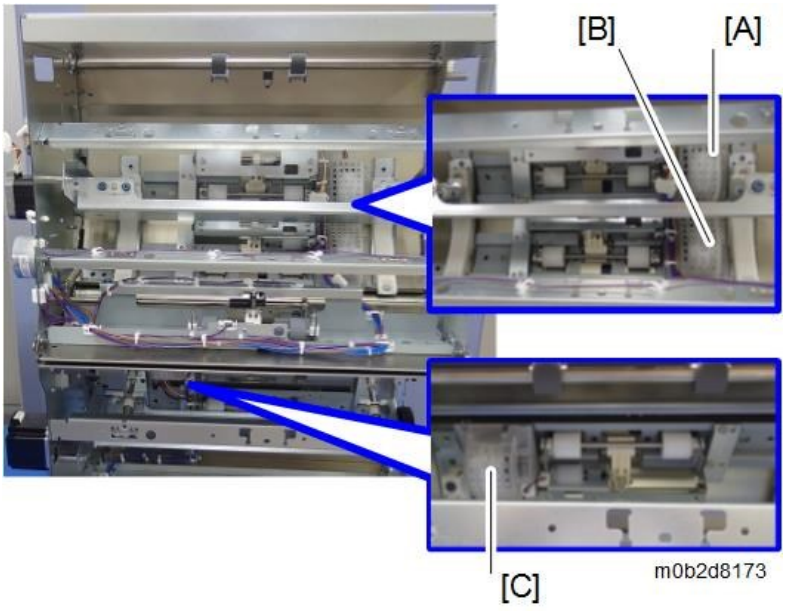




Tray 1 Vertical Transport Exit Contact Motor

Note

The position of the contact motors on the left side of the vertical transport unit is shown below.



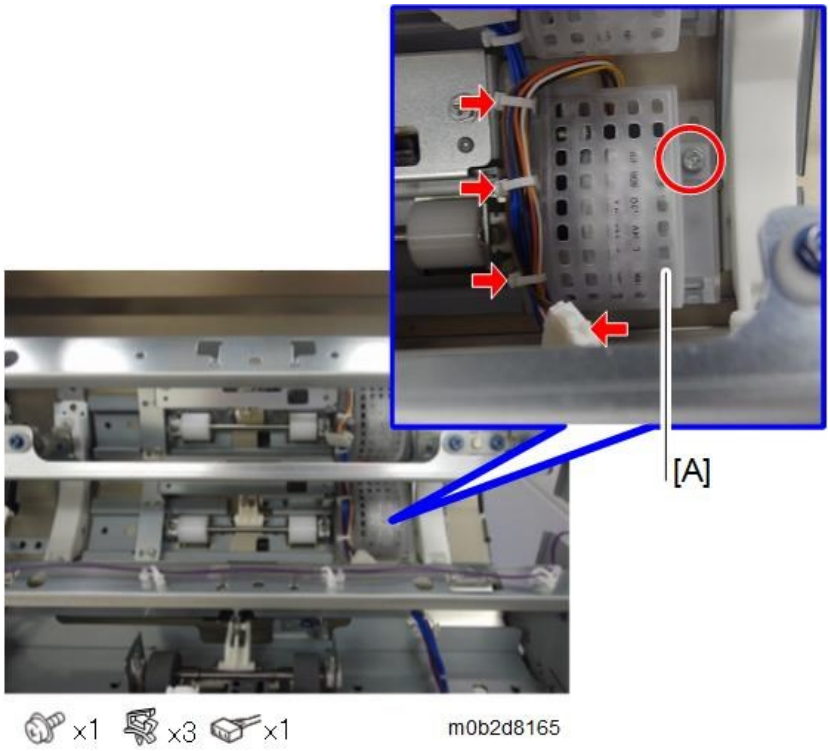
[A]: Tray 1 Vertical Transport Contact Motor

[B]: Tray 1 Vertical Transport Exit Contact Motor

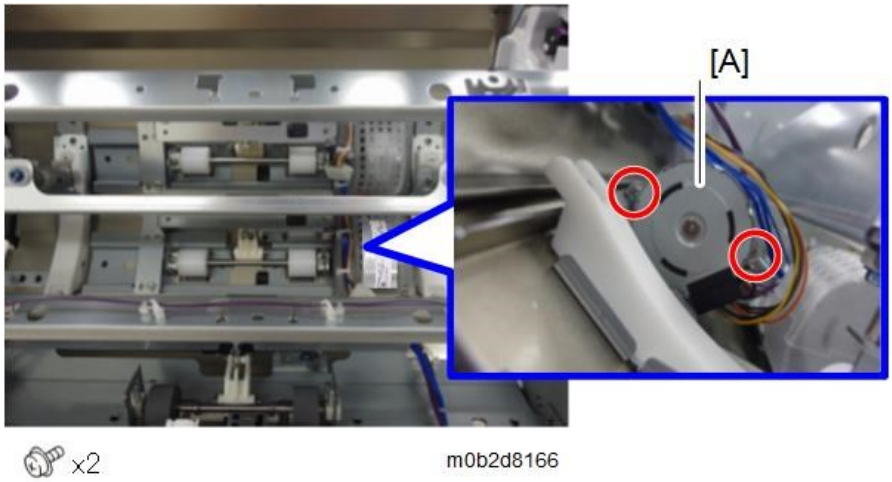
[C]: Tray 2 Vertical Transport Exit Contact Motor

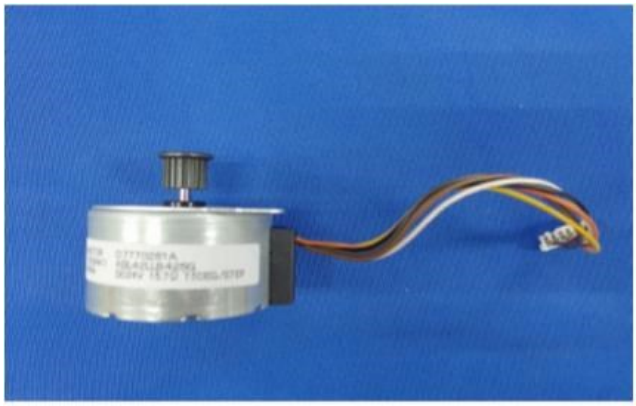
1. Remove the vertical feed unit (Vertical Feed Unit)

2. Release the clamps and connector, and remove the motor cover [A].



3. Remove the tray 1 vertical transport exit roller contact motor [A].



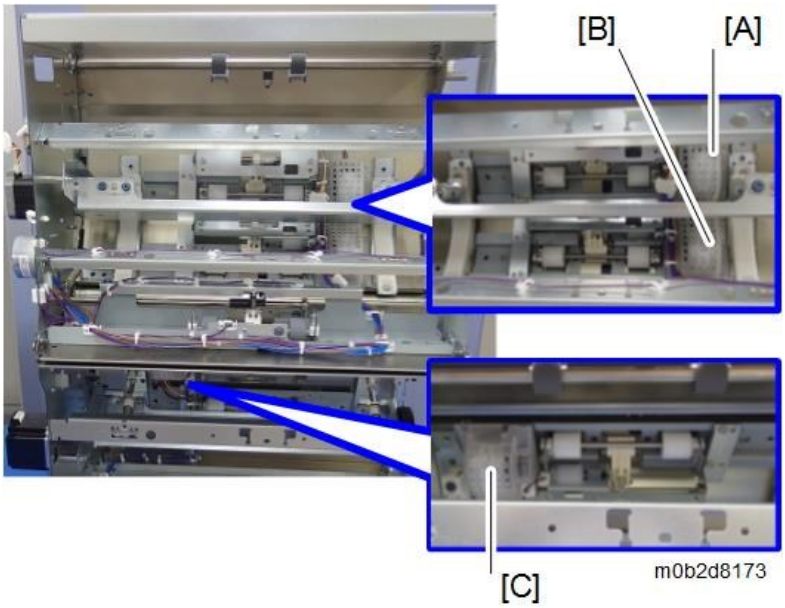


m0b2d8154

Tray 1 Vertical Transport Contact Motor

Note

The position of the contact motors on the left side of the vertical transport unit is shown below.



m0b2d8173

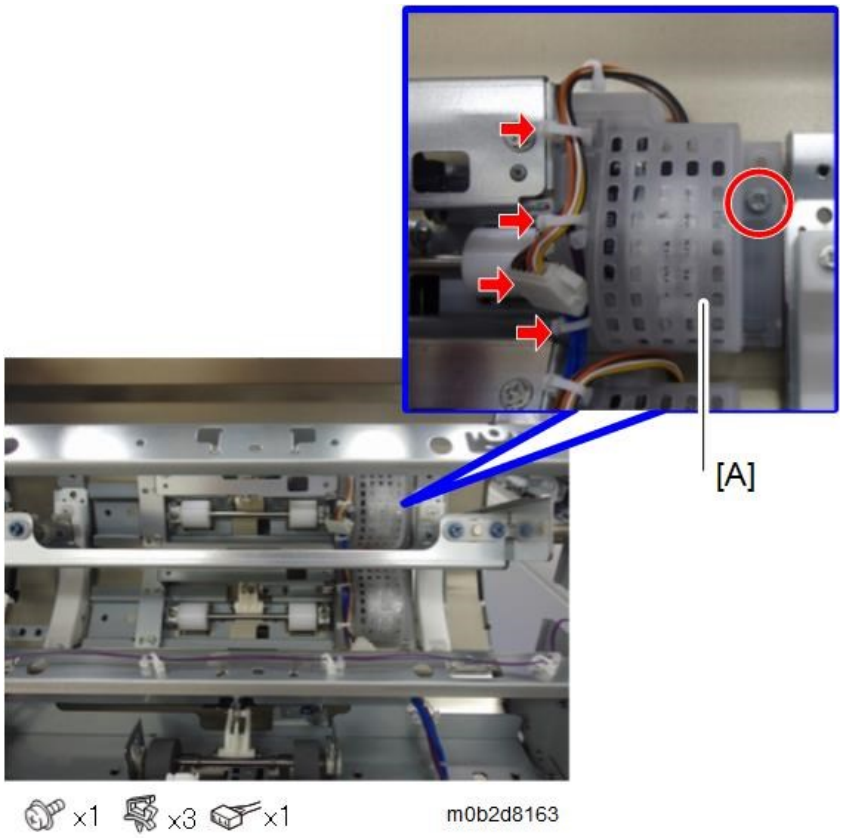
[A]: Tray 1 Vertical Transport Contact Motor

[B]: Tray 1 Vertical Transport Exit Contact Motor

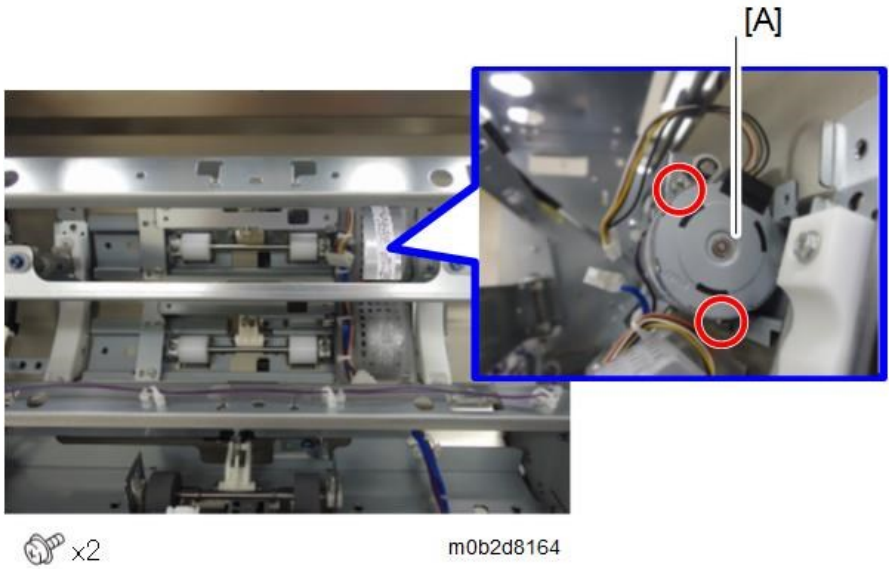
[C]: Tray 2 Vertical Transport Exit Contact Motor

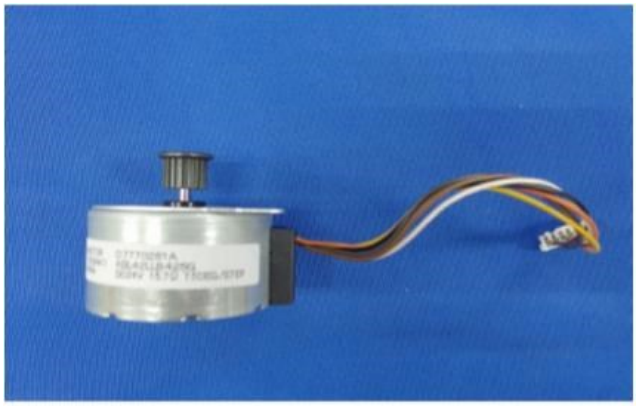
1. Remove the vertical feed unit (Vertical Feed Unit)

2. Release the clamps and connector, and remove the motor cover [A].



3. Remove the tray 1 vertical transport roller contact motor [A].

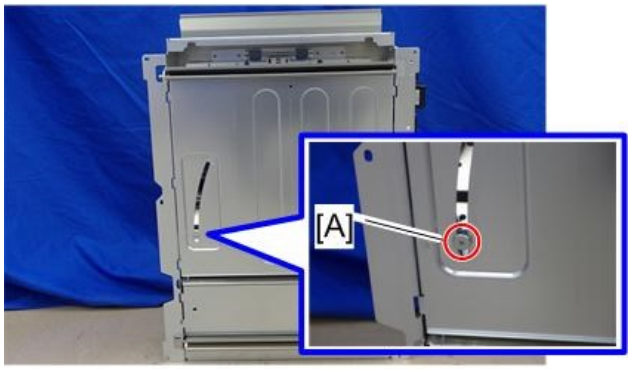




m0b2d8154

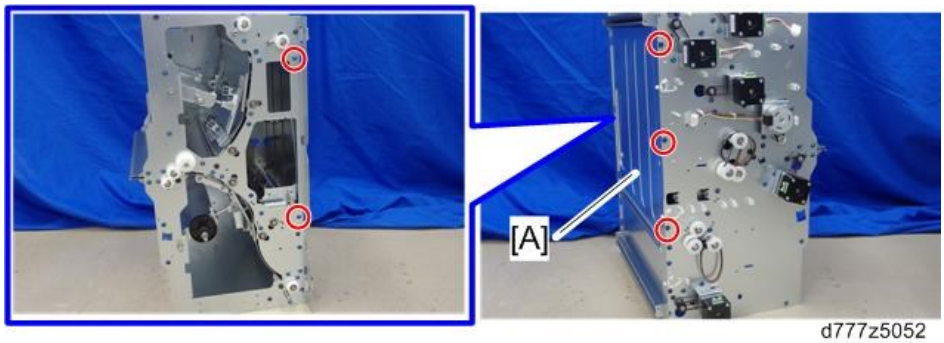
Vertical Transport Entrance Contact Sensor / Vertical Transport Entrance Sensor

1. Remove the vertical feed unit (Vertical Feed Unit)
2. Remove the shoulder screw [A] on the right side of the vertical feed unit.



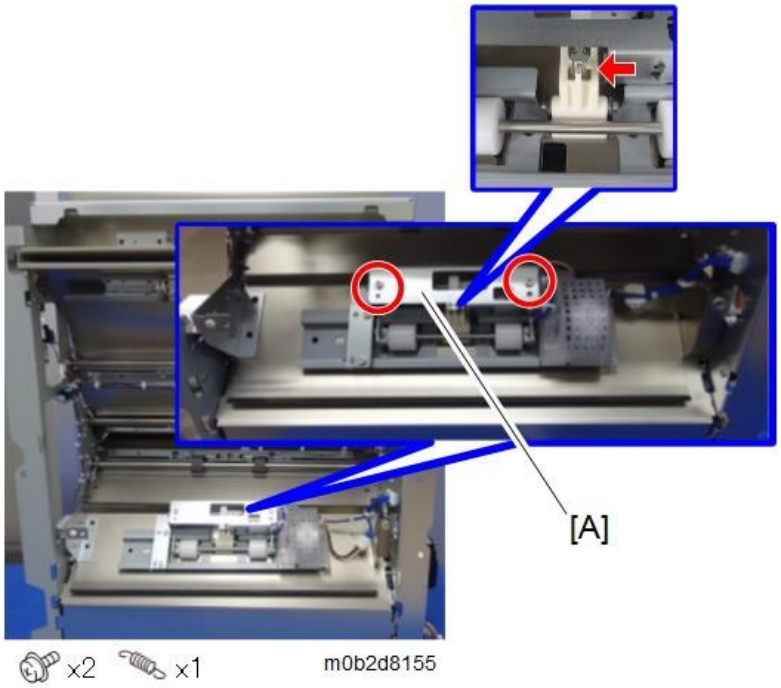
d777z5051

3. Remove the right cover [A] from the vertical feed unit (x5).

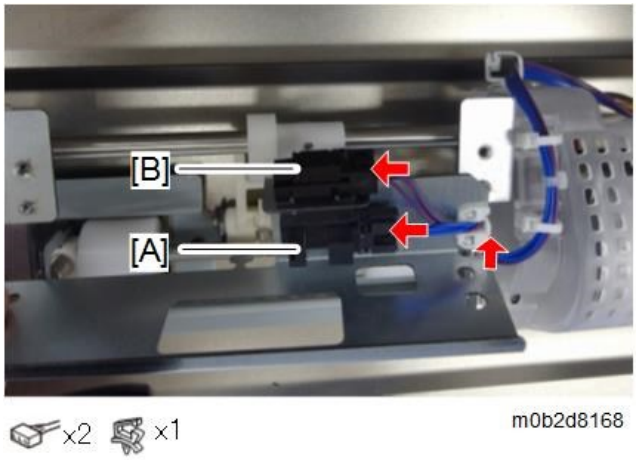


d777z5052

4. Remove the spring and the sensor bracket [A].

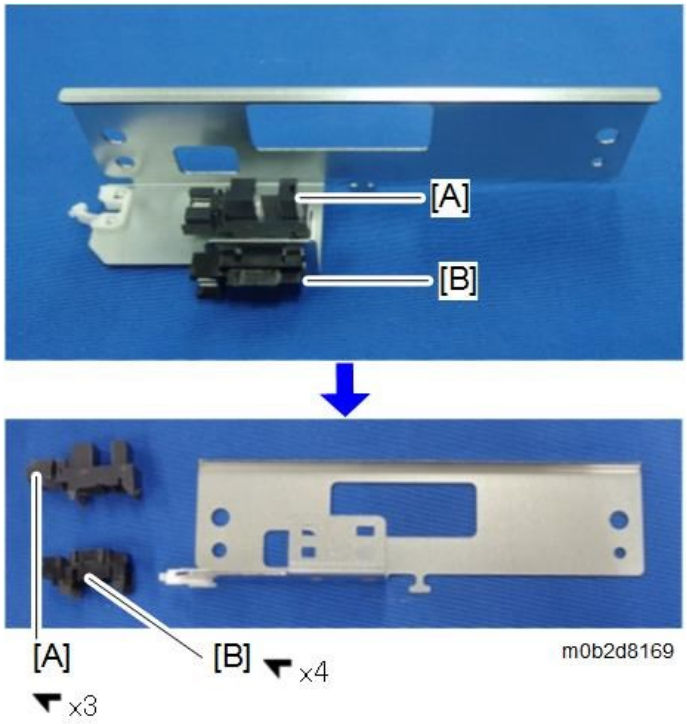


5. Turn over the sensor bracket, release the edge saddle, and disconnect the connectors of the vertical transport entrance contact sensor [A] and vertical transport entrance sensor [B].



6. Remove the vertical transport entrance contact sensor [A] and vertical transport entrance sensor

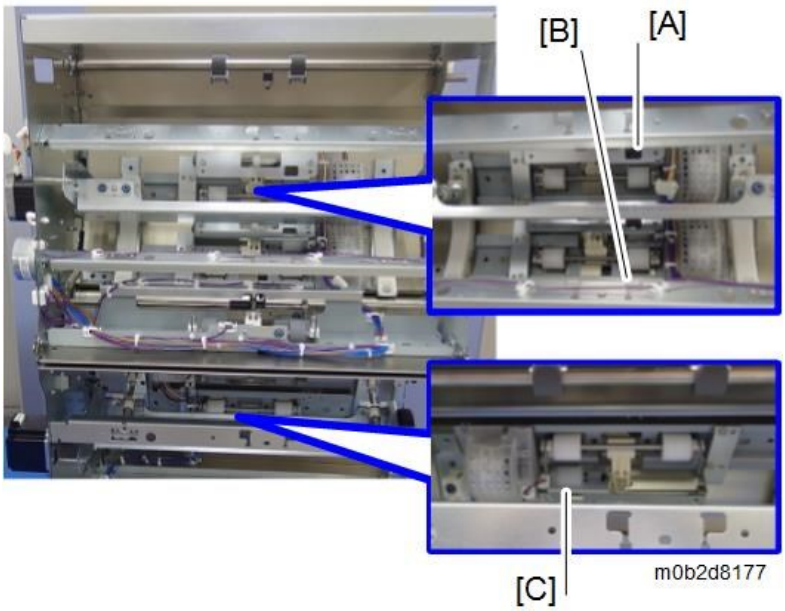
[B] from the sensor bracket.



Tray 2 Vertical Transport Exit Contact Sensor

Note

The position of the contact sensors on the left side of the vertical transport unit is shown below.

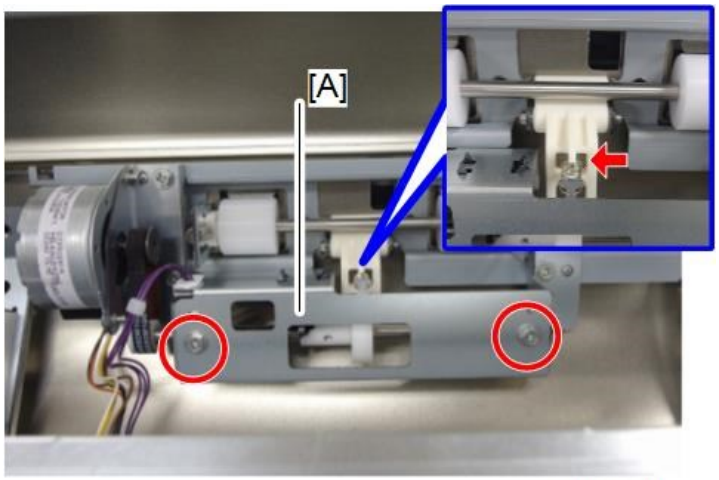


[A]: Tray 1 Vertical Transport Contact Sensor

[B]: Tray 1 Vertical Transport Exit Contact Sensor

[C]: Tray 2 Vertical Transport Exit Contact Sensor

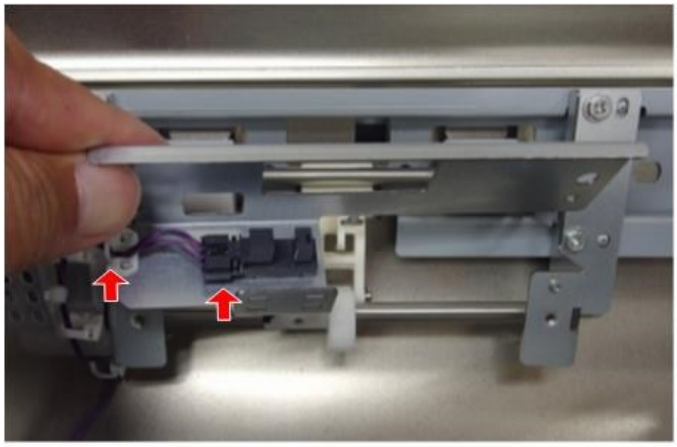
1. Remove the vertical feed unit (Vertical Feed Unit)
2. Remove the spring and the sensor bracket [A].



x2 x1

m0b2d8160

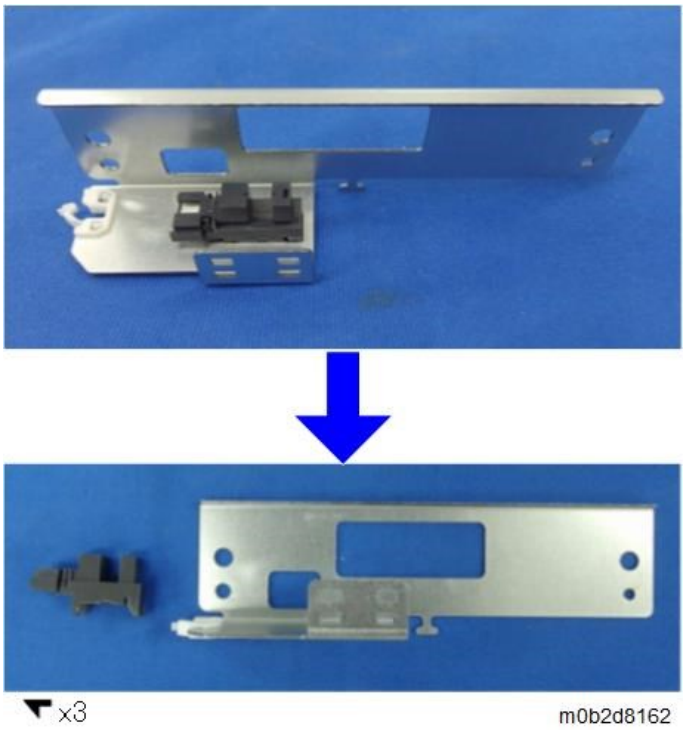
3. Turn over the sensor bracket, release the edge saddle, and disconnect the connector.



x1 x1

m0b2d8161

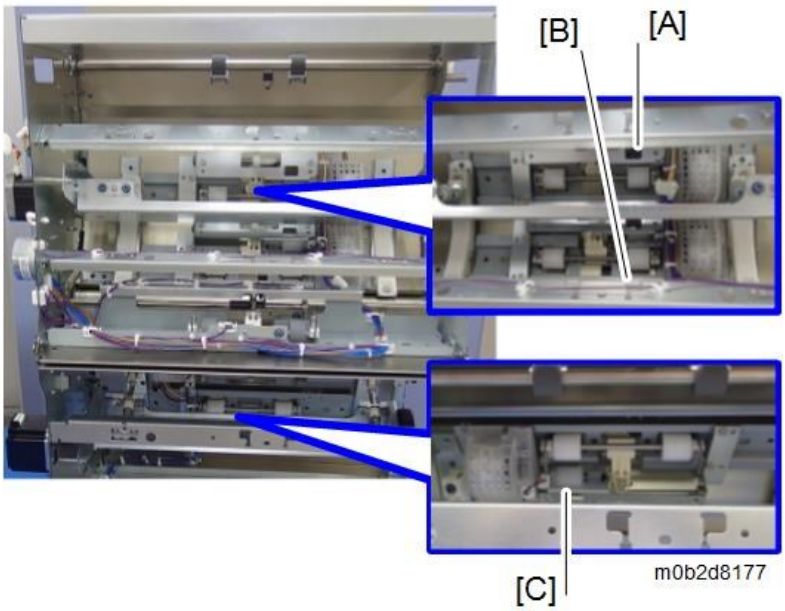
4. Remove the tray 2 vertical transport exit contact sensor from the sensor bracket.



Tray 1 Vertical Transport Exit Contact Sensor

Note

The position of the contact sensors on the left side of the vertical transport unit is shown below.

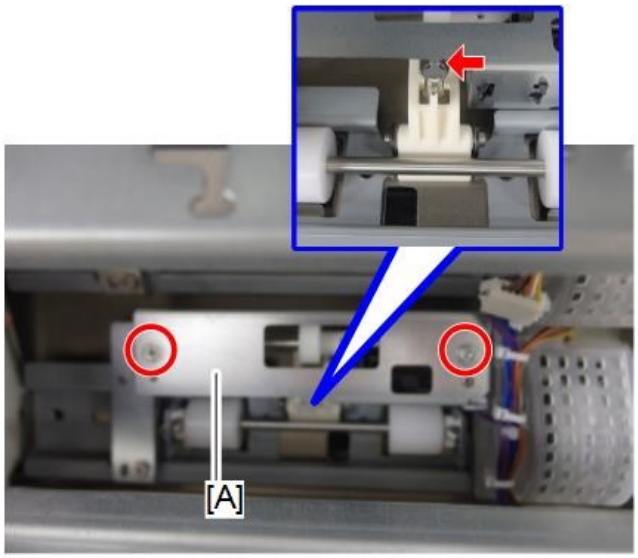


[A]: Tray 1 Vertical Transport Contact Sensor

[B]: Tray 1 Vertical Transport Exit Contact Sensor

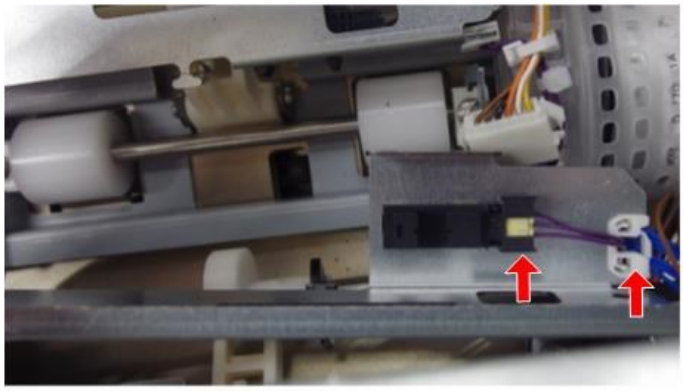
[C]: Tray 2 Vertical Transport Exit Contact Sensor

1. Remove the vertical feed unit (Vertical Feed Unit)
2. Remove the spring and the sensor bracket [A].



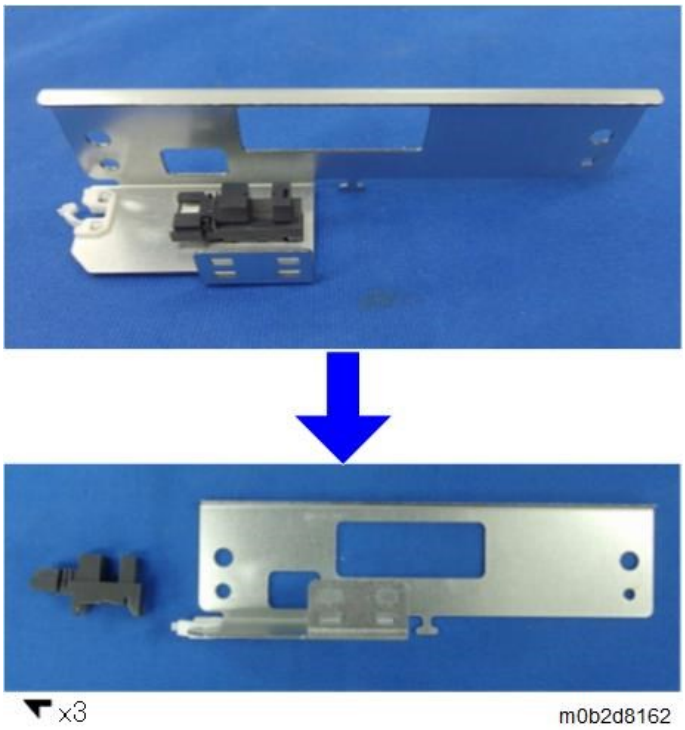
x2 x1 m0b2d8170

3. Turn over the sensor bracket, release the edge saddle, and disconnect the connector of the sensor.



x1 x1 m0b2d8167

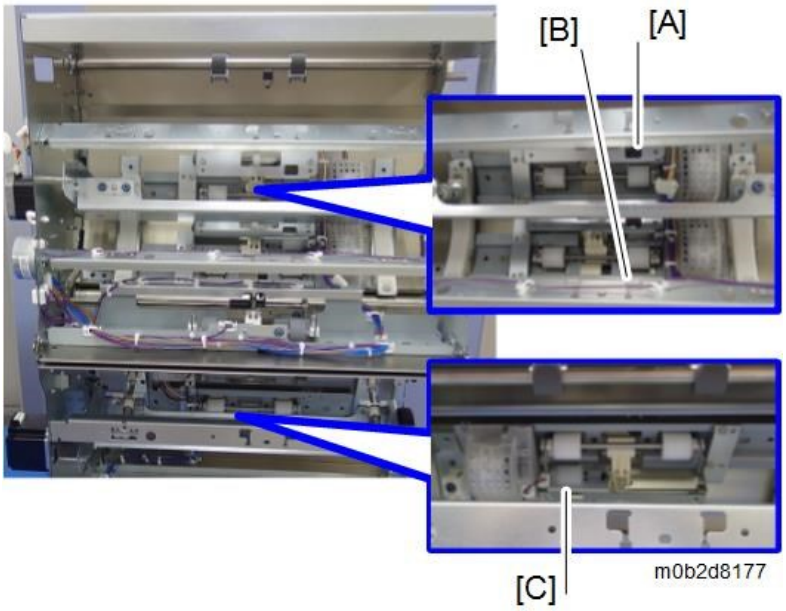
4. Remove the tray 1 vertical transport exit contact sensor from the sensor bracket.



Tray 1 Vertical Transport Contact Sensor

Note

The position of the contact sensors on the left side of the vertical transport unit is shown below.



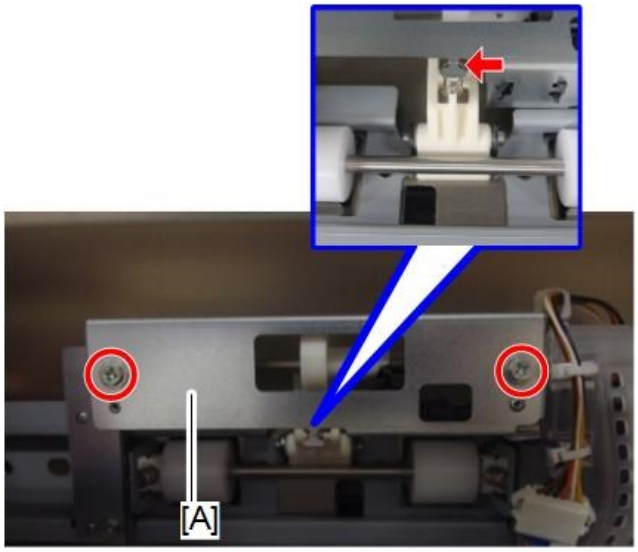
[A]: Tray 1 Vertical Transport Contact Sensor

[B]: Tray 1 Vertical Transport Exit Contact Sensor

[C]: Tray 2 Vertical Transport Exit Contact Sensor

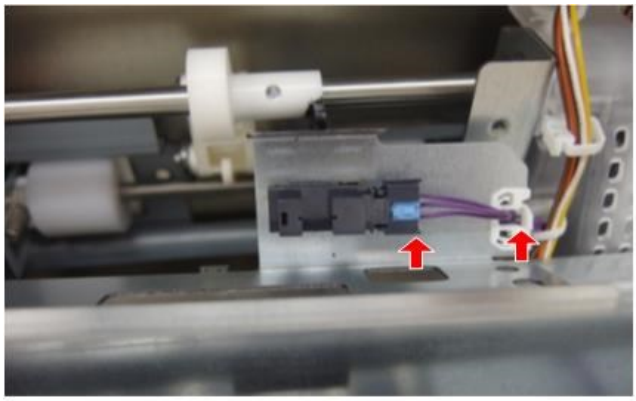
1. Remove the vertical feed unit (Vertical Feed Unit)

2. Remove the spring and the sensor bracket [A].



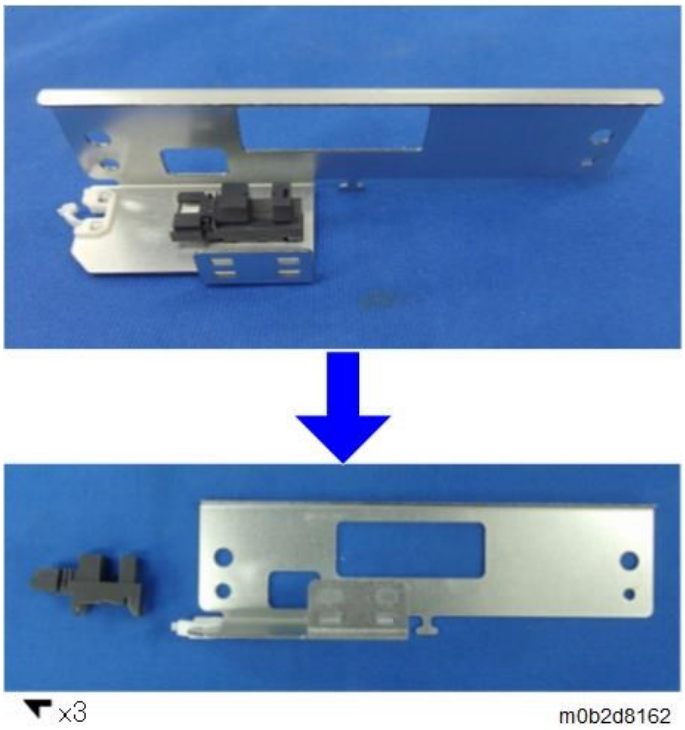
x2 x1 m0b2d8171

3. Turn over the sensor bracket, release the edge saddle, and disconnect the connector of the sensor.



x1 x1 m0b2d8172

4. Remove the tray 1 vertical transport contact sensor from the sensor bracket.



Jam Removal LED

1. Remove the upper inner cover. (Upper Inner Cover)

Note

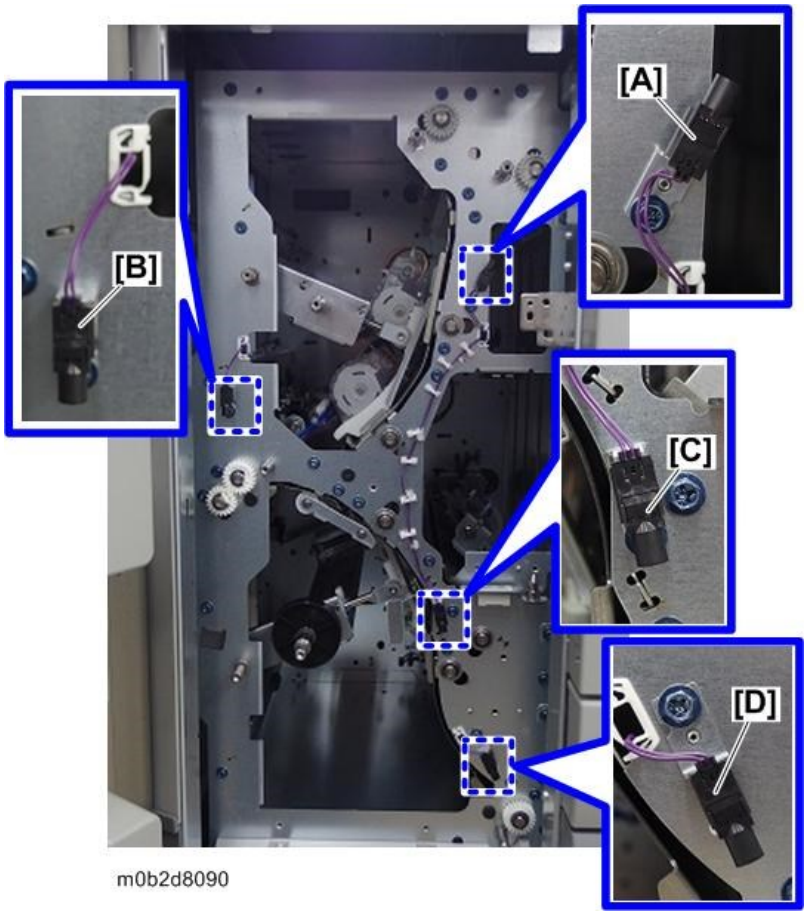
The position of the jam removal LEDs

[A]: Tray 1 Vertical Transport Lever LED

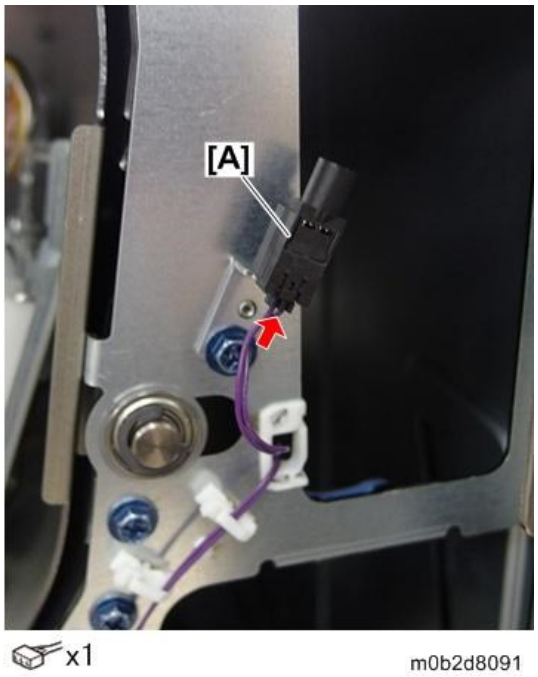
[B]: LCIT Exit Knob LED

[C]: Horizontal Transport Lever LED

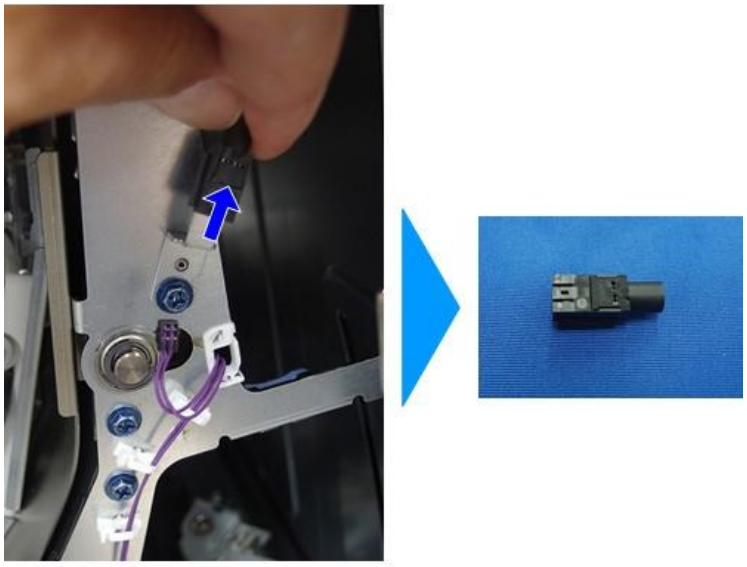
[D]: Tray 2 Vertical Transport Lever LED



2. Disconnect the connector of the jam removal LED [A].



3. Remove the jam removal LED.



m0b2d8092

Note

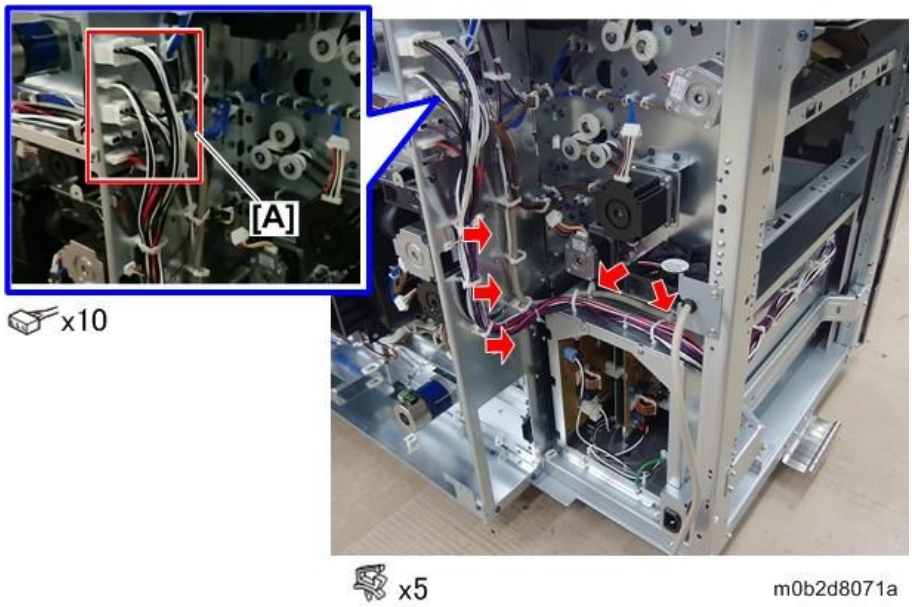
The same procedure is applicable to all the jam LEDs .

Replace the other jam LEDs in the same way.

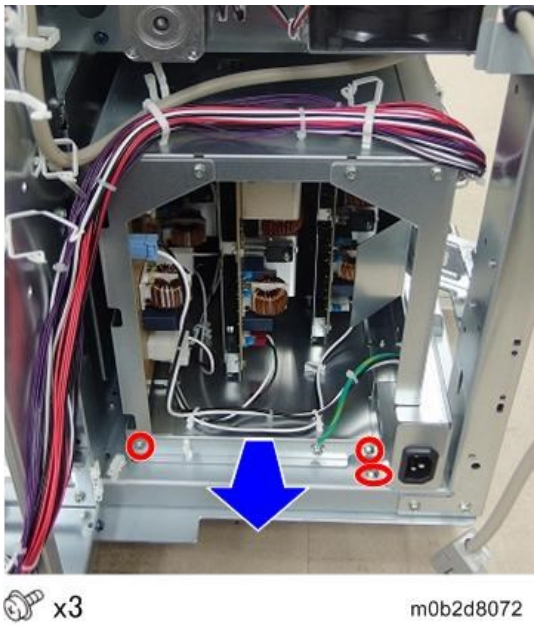
PSU Box

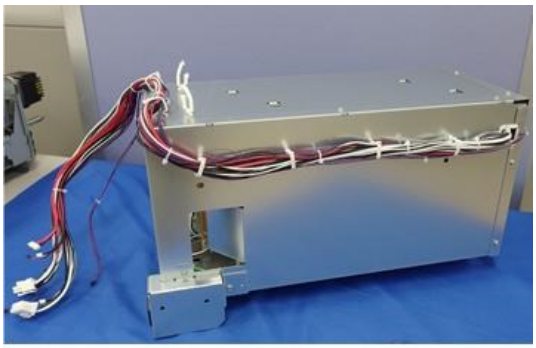
PSU box

1. Remove the rear right and left covers (Rear Right Cover, Rear Left Cover).
2. Disconnect the connectors [A] and open the clamps.



3. Pull out the PSU box [A].



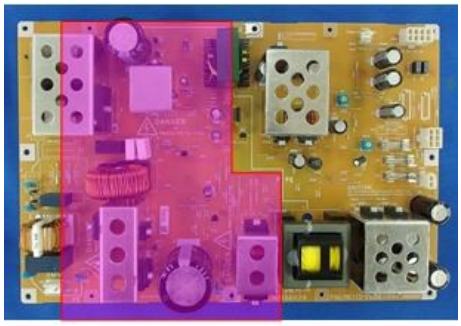


m0b2d8073

PSU1, 2, 3 / AC Drive Board

⚠CAUTION

The PSU has residual charge even some time after the power turns off. NEVER touch the areas outlined in red in the photo below, to prevent electric shock caused by residual charge. After the removal, never place the board on an electrically-conductive surface, such as metal.

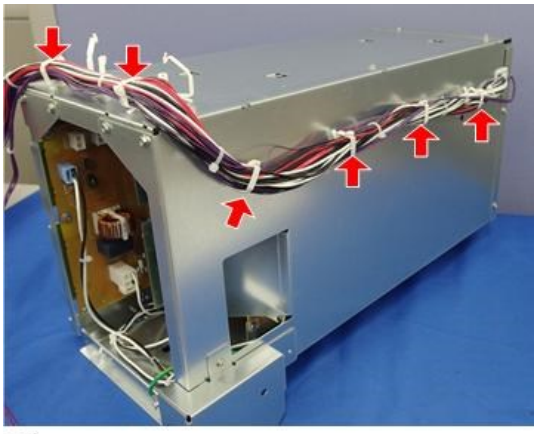


m0b2d8093

Note

PSUs 1, 2 ,3 are all interchangeable.

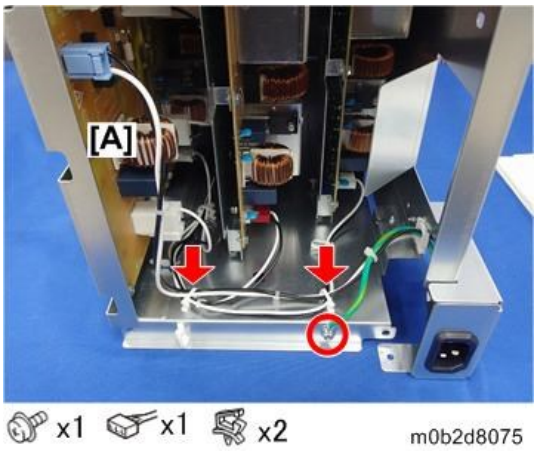
1. Remove the PSU box (PSU box)
2. Open the clamps to free the harness.



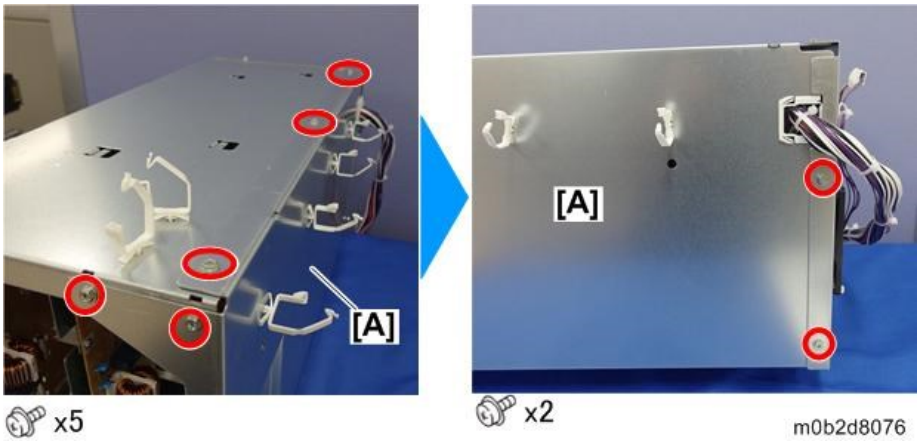
x6 m0b2d8074

3. Release the grounding wire and disconnect the connector [A] on the AC drive board, and then

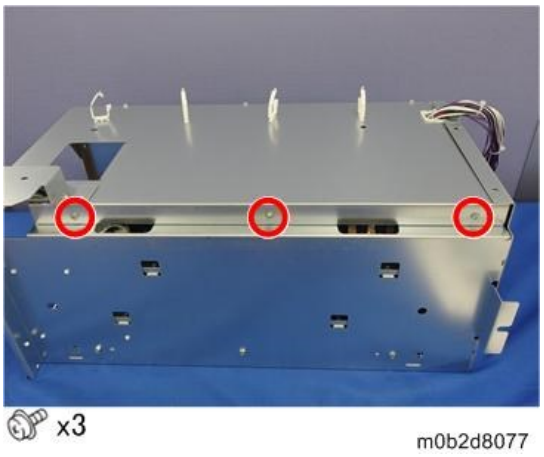
open the clamps to release the harness.



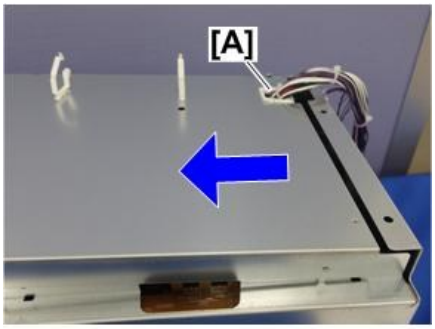
4. Remove the screws on the top and side of the PSU left cover [A].



5. Lay down the PSU box [A] to remove the screws on the lower side.



6. Open the clamp [A] to release the harness, and then remove the PSU left cover.



m0b2d8078

Note

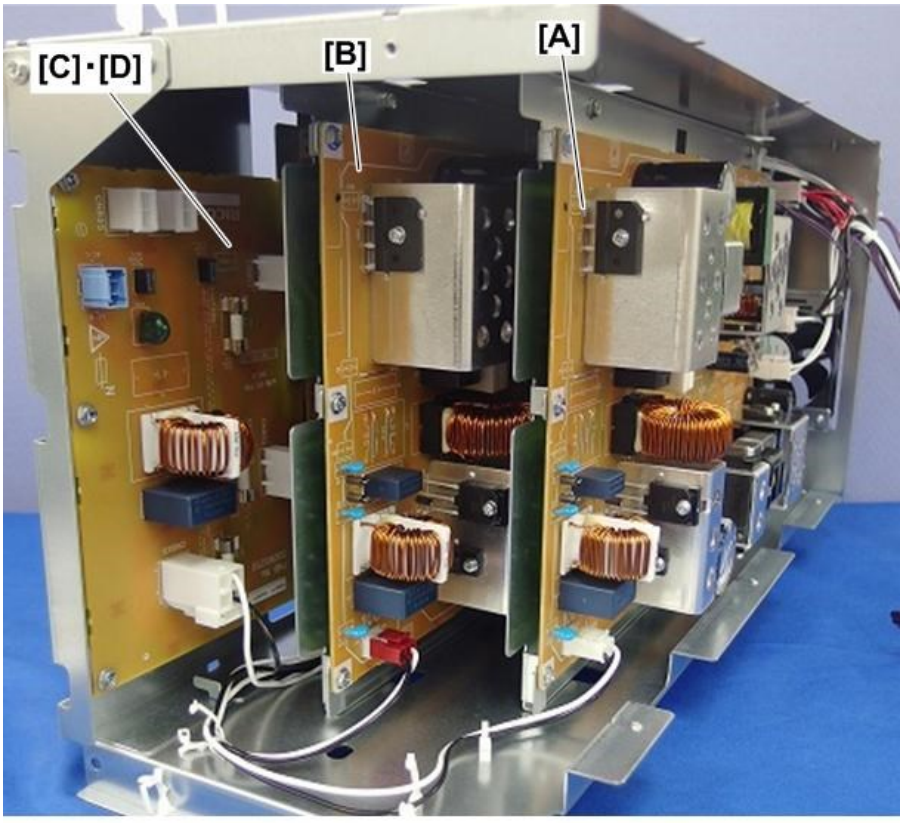
PSU1, 2, 3 / AC Drive Board Location

[A]: PSU 1

[B]: PSU 2

[C]: PSU 3 (Rear)

[D]: AC Drive Board (Front)



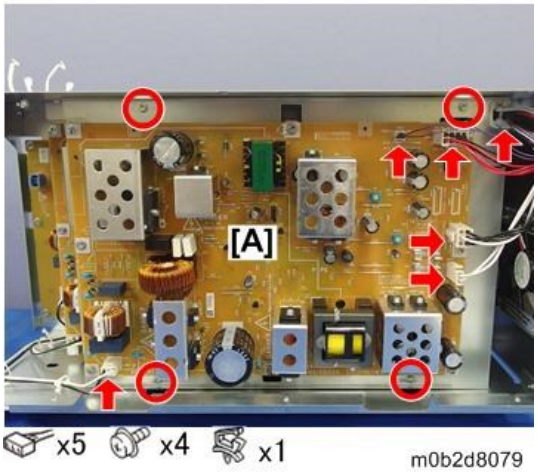
m0b2d8087

To replace PSU 2 or 3, you need to remove the PSU(s) to the right of the one to replace.

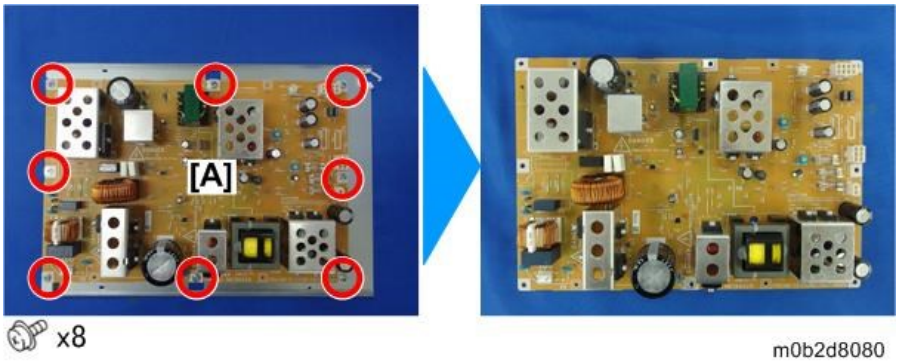
- PSU 2 replacement: Requires removal of PSU 1.
- PSU 3 or AC drive board replacement: Requires removal of PSU 1 and PSU 2.

7. Pull out the connector and remove the screws on PSU 1 [A], and then open the clamp at the rear

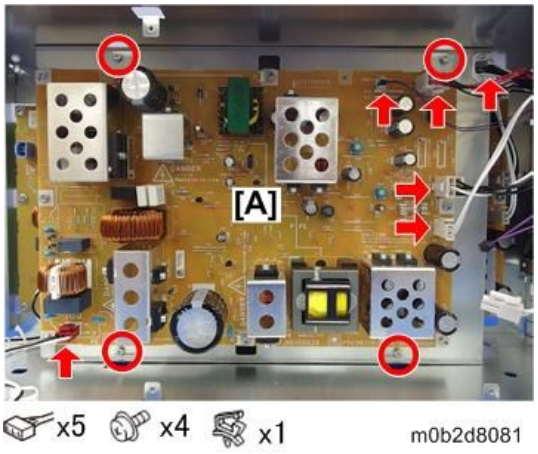
corner of the bracket to detach PSU 1 with its bracket.



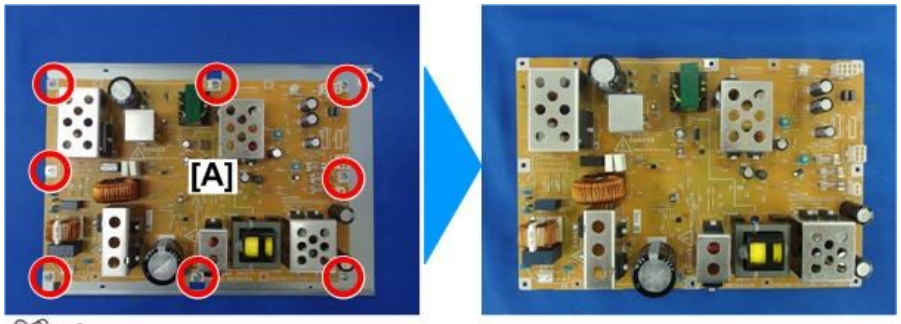
8. Detach the board from the bracket.



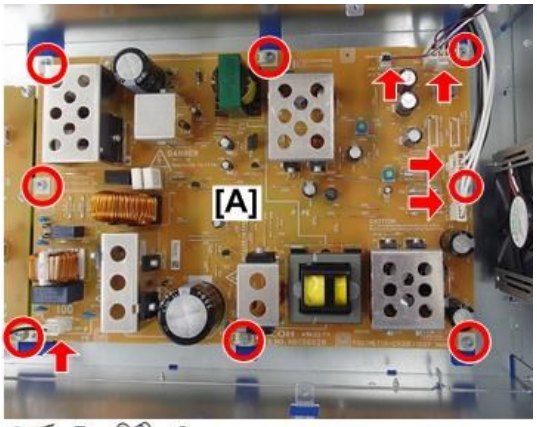
9. Pull out the connector and remove the screws on PSU 2 [A], and then open the clamp at the rear corner of the bracket to detach PSU 2 with its bracket.



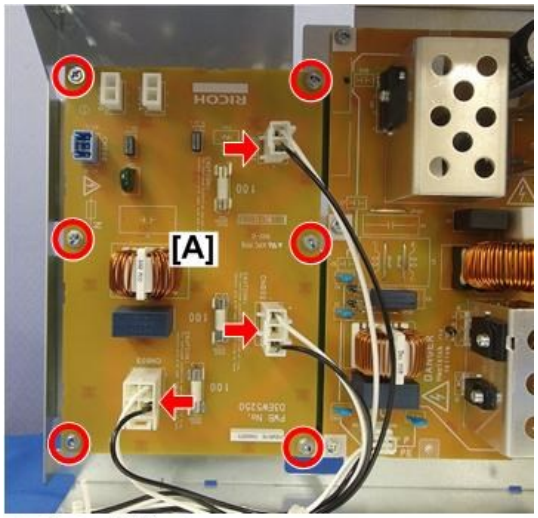
10. Detach the board from the bracket.

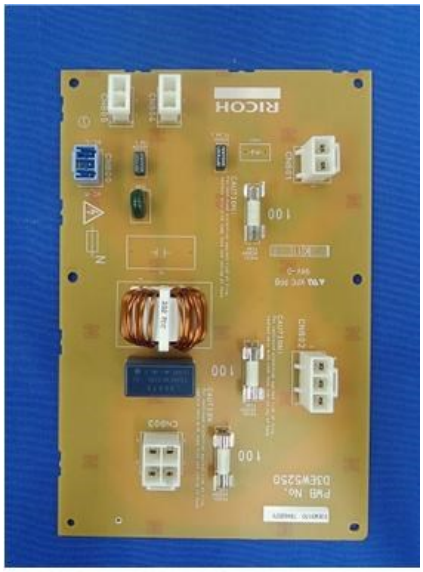


11. Pull out the connectors and then remove the screws on PSU 3 [A], to detach PSU 3.



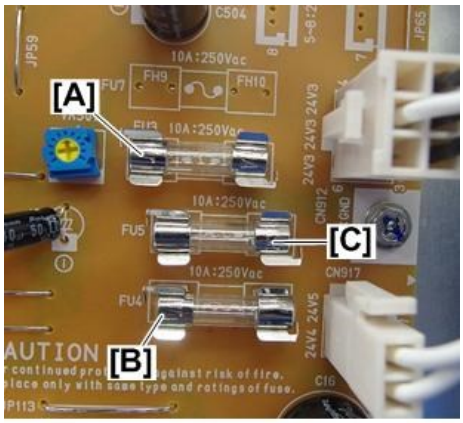
12. Remove the AC drive board.





m0b2d8086

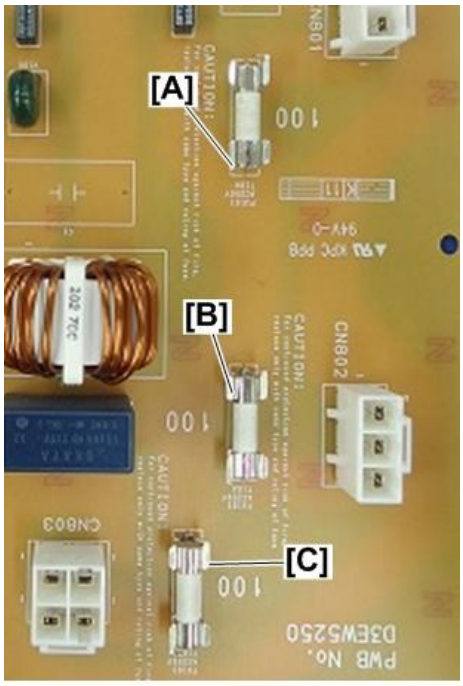
Replaceable fuses on PSU 1, 2, and 3



m0b2d8088

	Fuse
[A]	FU3: 10A, 250V
[B]	FU4: 10A, 250V
[C]	FU5: 10A, 250V

Replaceable fuses on the AC drive board

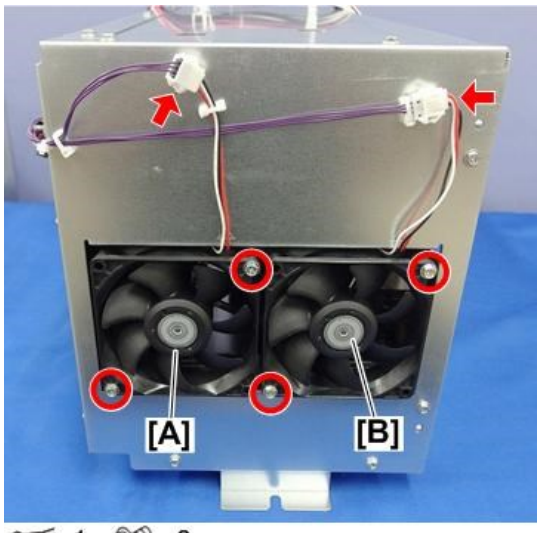


m0b2d8086a

	Fuse
[A]	FU101: 10A, 250V
[B]	FU102: 10A, 250V
[C]	FU103: 10A, 250V

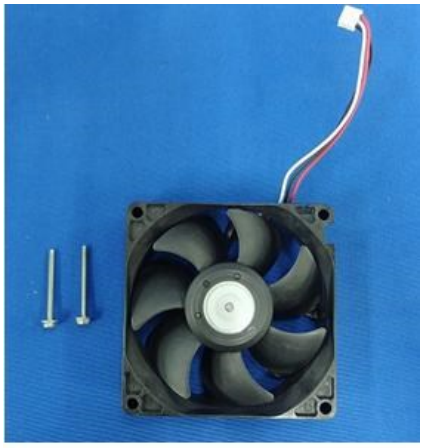
PSU Cooling Fan 1, 2

1. Remove the PSU box (PSU box)
2. Remove PSU cooling fan 1 [A] and PSU cooling fan 2 [B].



x1 x2

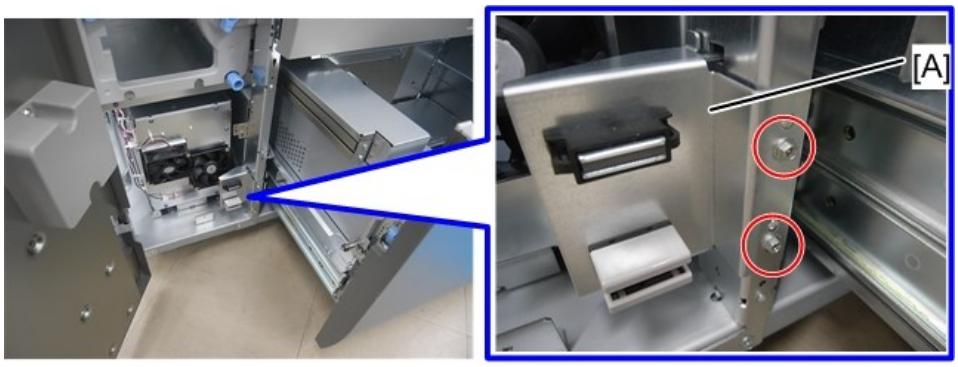
m0b2d8084



m0b2d8085

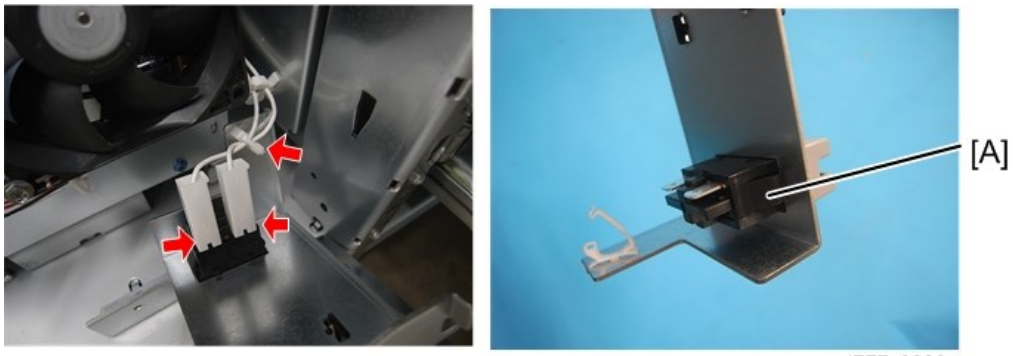
Interlock Switch

1. Open the front door.
2. Remove the lower inner cover (Lower Inner Cover)
3. Remove the bracket [A] (x2)



d777z0098

4. Remove the interlock switch [A] (x1, x2)



d777z0099

2. Detailed Descriptions

Overview

Specifications

Item	Specifications
Configuration	Console, attached to the right side of the main machine
Paper weight	Tray 1: 40.0 to 470.0g/m^2 Tray 2: 40.0 to 470.0g/m^2
Paper size	13 × 19.2" SEF, 13 × 19"SEF, 12.6 × 19.2"SEF, 12.6 × 18.5" ,13 × 18" SEF, SRA3 SEF, 12 × 18" SEF,SRA4 SEF/LEF,A3 SEF, A4 SEF/LEF, A5 SEF/LEF, A6 SEF, B4 SEF, B5 SEF/LEF, B6 SEF,DLT SEF, LG SEF, 8.5 × 13" SEF, LT SEF/LEF, 8.25 × 14" SEF, 8.25 × 13" SEF, 8 × 13" SEF,8 × 10.5" LT SEF/LEF, 8 × 10" SEF/LEF, Executive SEF/LEF, HLT SEF/LEF, Line slider 1 SEF/LEF, Line slider 2 SEF, 8-Kai SEF, 16-Kai SEF/LEF,11 × 15" SEF, 11 × 14" SEF, 10 × 15" SEF, 10 × 14" SEF, Postcard SEF Custom size: Width: 100mm to 330.2mm Length: 139.7mm to 487.7mm
Paper tray capacity	Tray 1: 2440 sheets Tray 2: 2440 sheets
Power source	AC100 to 127V±10% (NA) AC220 to 240V±10% (EU)
Power consumption	Less than 1000W
Dimensions (W x D x H)	1,054mm × 730mm ×1,000mm
Weight	Less than 230kg

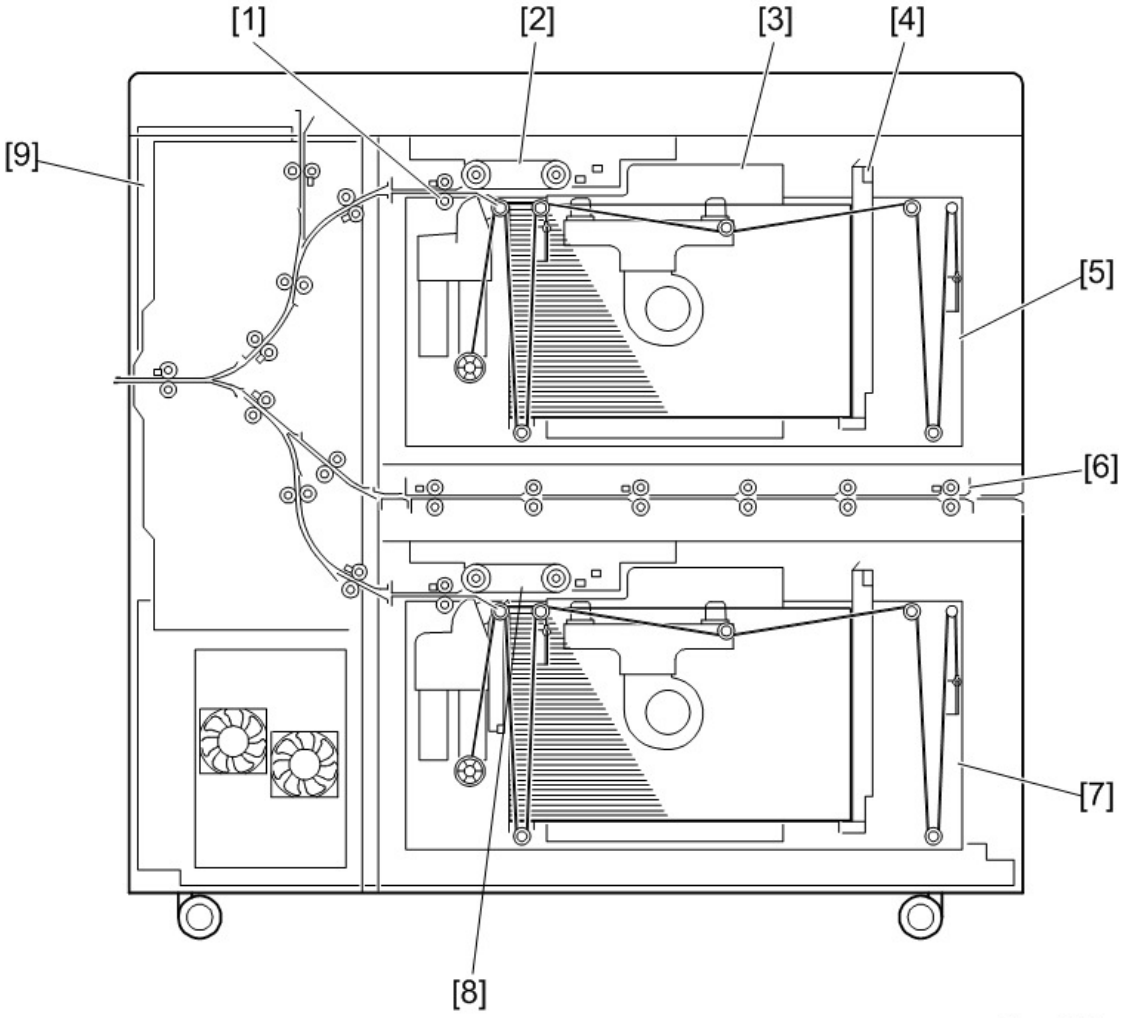
System Components

Item	Description
Paper feed method	Air pick paper feed
Paper size switching, detection	Adjustable side fences, end fence for paper width, length adjustment with automatic paper size detection
Paper Tray Lift Mechanism	The LCIT lift motor and wires lift and lower the paper tray. When the paper feed tray is pulled out, it lowers by its own weight.
Remaining Paper	By counting pulses of the tray lift motor, the remaining amount of paper is

Item	Description
Detection	detected and displayed on the operation panel (in four stages).
Paper end detection	Two photosensors mounted in the paper feed belt unit detect when paper has run out
Anti-condensation Heater	One anti-condensation heater as standard equipment (100V 18W)

Mechanical Component Layout

Front

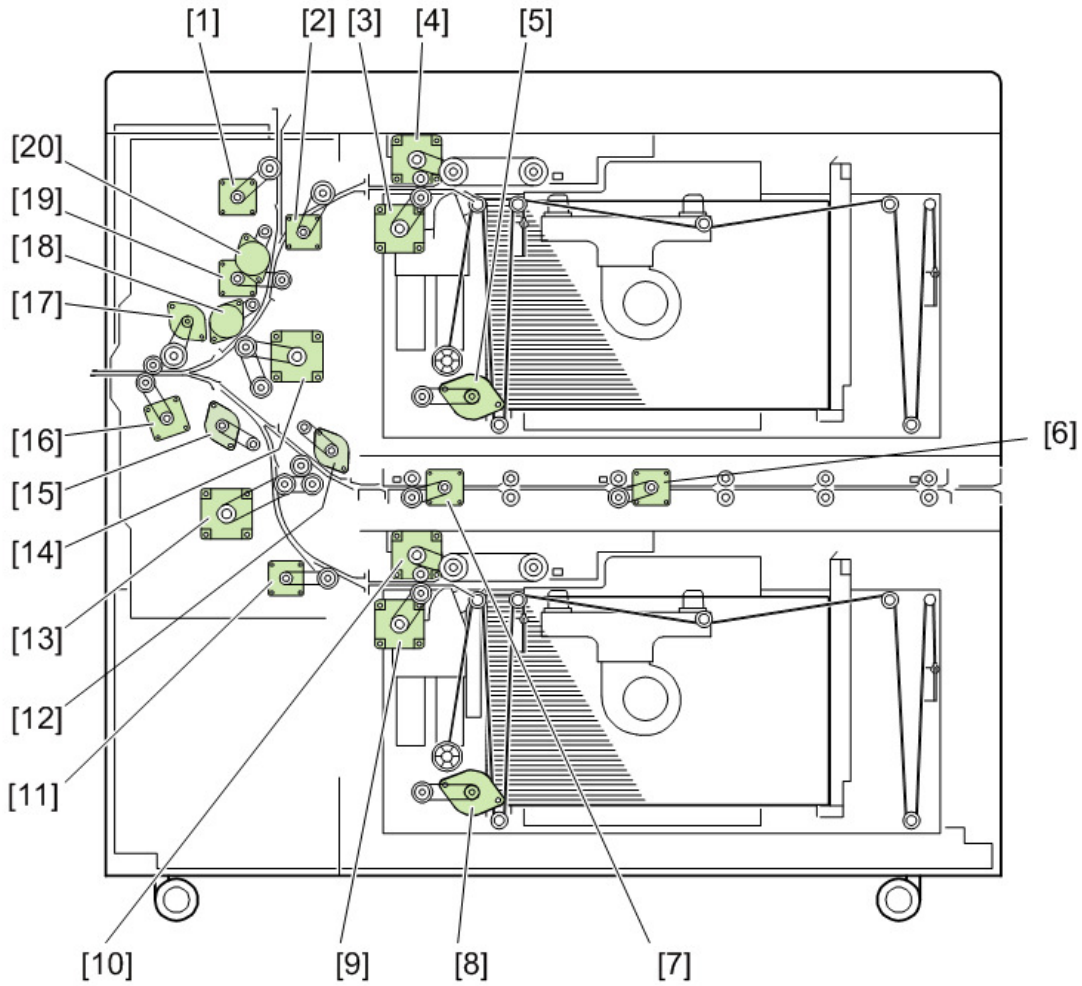


d3ewc8001

No.	Name	No.	Name
1	Grip Roller	6	Horizontal Transport Unit *
2	Tray 1 Paper Feed Belt Unit	7	Paper Feed Tray 2
3	Side Fences	8	Tray 2 Paper Feed Belt Unit
4	End Fence	9	Vertical Feed Unit
5	Paper Feed Tray 1	-	-

* This component is provided with the bridge unit. When attaching the bridge unit BU5010 to this machine, this component will be installed.

Motor Layout



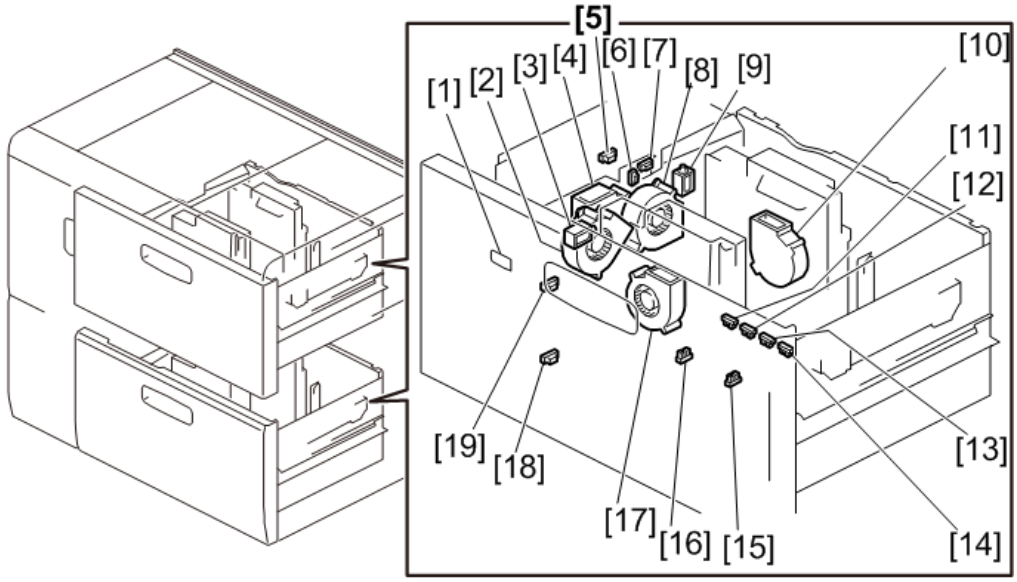
d3ewc8002

No.	Name	No.	Name
1	Bypass Transport Motor *1	11	Tray 2 Vertical Transport Motor 1
2	Tray 1 Vertical Transport Motor 1	12	Vertical Transport Entrance Contact Motor
3	Tray 1 Grip Motor	13	Tray 2 Vertical Transport Motor 2
4	Tray 1 Pickup belt Motor	14	Vertical Transport Exit Motor
5	Tray 1 LCIT Lift Motor	15	Tray 2 Vertical Transport Exit Contact Motor
6	Horizontal Transport Entrance Motor*2	16	LCIT Exit Motor
7	Horizontal Transport Exit Motor *2	17	LCIT Exit Roller Contact Motor
8	Tray 2 LCIT Lift Motor	18	Tray 1 Vertical Transport Exit Contact Motor
9	Tray 2 Grip Motor	19	Tray 1 Vertical Transport Motor 2
10	Tray 2 Pickup Belt Motor	20	Tray 1 Vertical Transport Contact Motor

*1 This motor is provided with the bypass tray. When attaching the Multi Bypass Tray BY5020 to this machine, this motor will be installed.

*2 These motors are provided with the bridge unit. When attaching the bridge unit BU5010 to this machine, they will be installed.

Paper Tray



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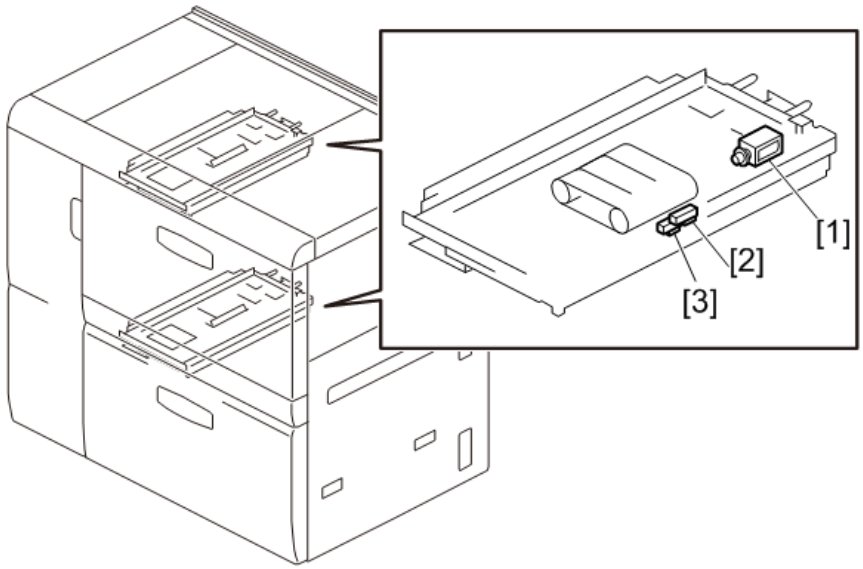
No.	Name	No.	Name
1	LED	11	Paper Size Sensor 1
2	Separation Fan	12	Paper Size Sensor 2
3	Return Solenoid	13	Paper Size Sensor 3
4	Float Fan	14	Paper Size Sensor 4
5	Feed Sensor	15	LCIT Paper Length Sensor 2
6	Paper Upper Limit Sensor 2	16	LCIT Paper Length Sensor 1
7	Paper Upper Limit Sensor 1	17	Side Fan (Front)
8	Return Fan	18	Paper Lower Limit Sensor
9	Float Fan Shutter Solenoid	19	Paper Height Middle Sensor
10	Side Fan (Rear)		

Tray 1 and tray 2 have the same specifications.

Feed Transport



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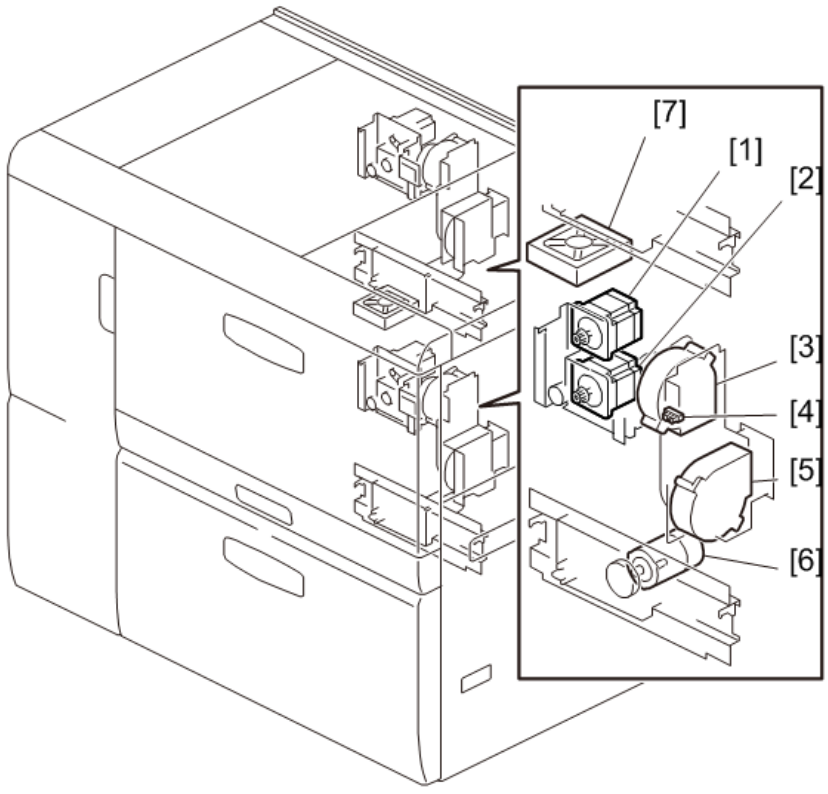
No.	Name	No.	Name
1	Suction Fan Shutter Solenoid	3	Paper End Sensor 2
2	Paper End Sensor 1		

Paper Feed



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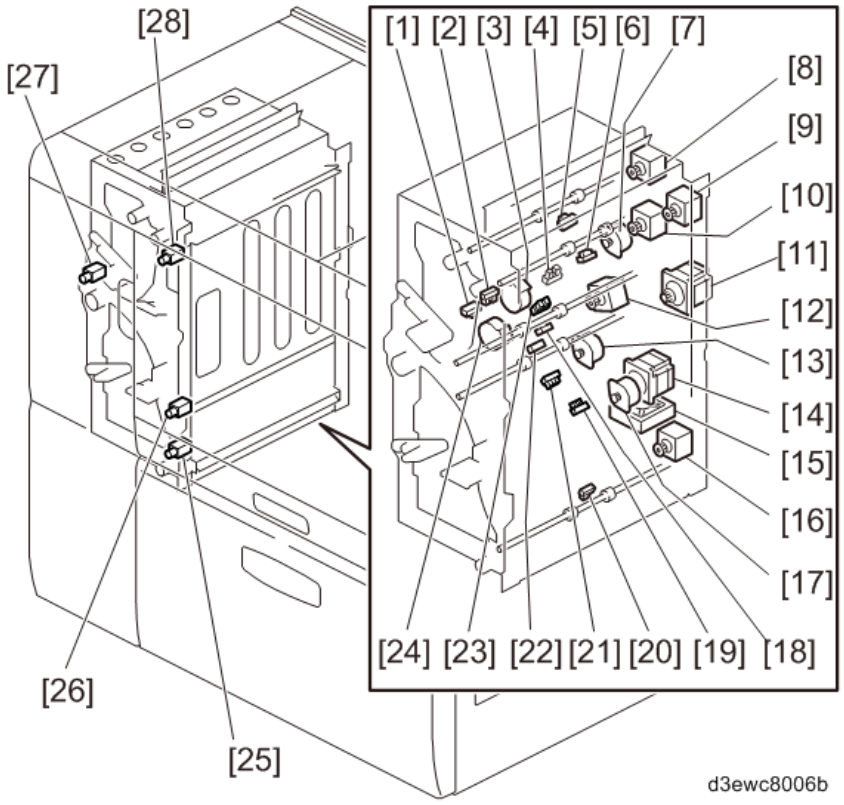
No.	Name	No.	Name
1	Pickup Belt Motor	5	Suction Fan 2
2	Grip Motor	6	LCIT Lift Motor
3	Suction Fan 1	7	Transport Motor Cooling Fan
4	Tray Upper Limit Sensor		

Paper Transport

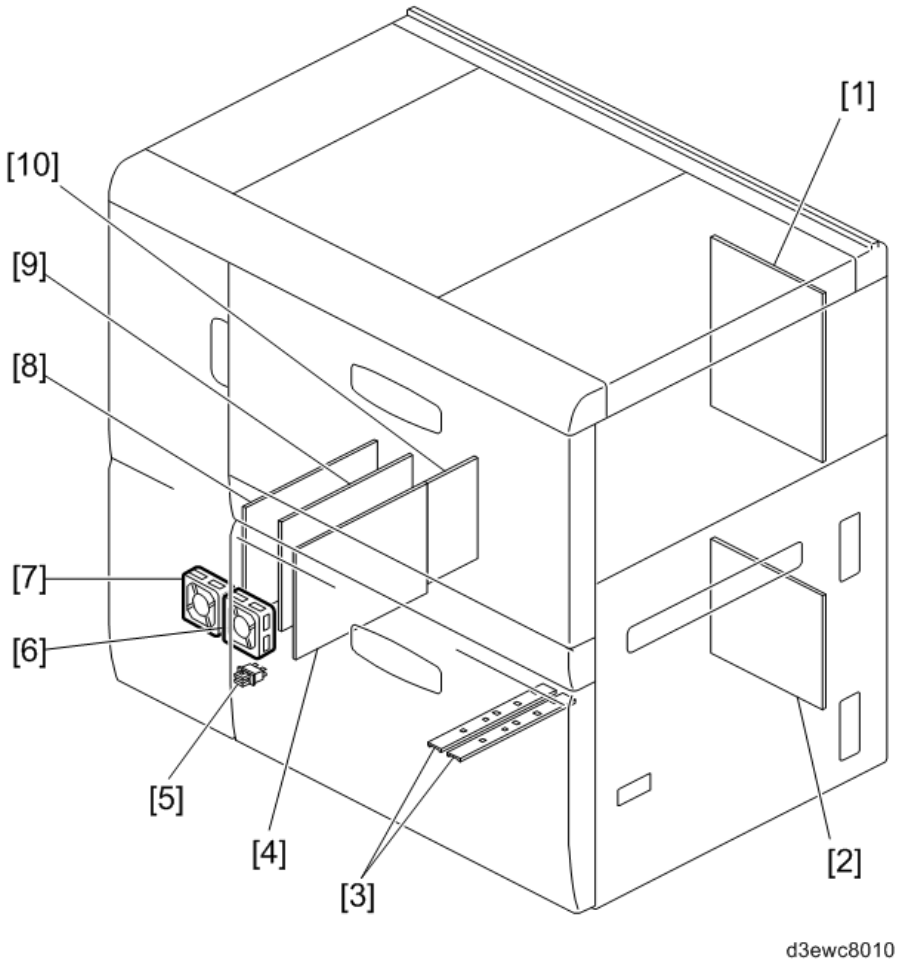


No.	Name	No.	Name
1	LCIT Exit Sensor	15	Vertical Transport Unit Cooling Fan
2	LCIT Exit Roller Contact Sensor	16	Tray 2 Vertical Transport Motor 1
3	Tray 1 Vertical Transport Contact Motor	17	Vertical Transport Entrance Contact Motor
4	Tray 1 Vertical Transport Contact Sensor	18	Tray 1 Vertical Transport Sensor
5	Bypass Vertical Transport Sensor	19	Vertical Transport Entrance Contact Motor
6	Tray 1 Transport Sensor	20	Tray 2 Vertical Transport Sensor
7	LCIT Exit Roller Contact Motor	21	Tray 2 Vertical Transport Exit Contact Sensor
8	Bypass Vertical Transport Motor (*1)	22	Tray 2 Transport Sensor
9	Tray 1 Vertical Transport Motor 1	23	Tray 1 Vertical Transport Exit Contact Sensor
10	Tray 1 Vertical Transport Motor 2	24	Tray 1 Vertical Transport Exit Contact Motor
11	Vertical Transport Exit Motor	25	Tray 2 Vertical Transport Lever LED

No.	Name	No.	Name
12	LCIT Exit Motor	26	Horizontal Transport Lever LED Tray 2 Vertical Transport Sensor
13	Tray 2 Vertical Transport Exit Contact Motor	27	LCIT Exit Knob LED LCIT Exit Roller Contact Motor Cooling Fan
14	Tray 2 Vertical Transport Motor 2	28	Tray 1 Vertical Transport Lever LEDV

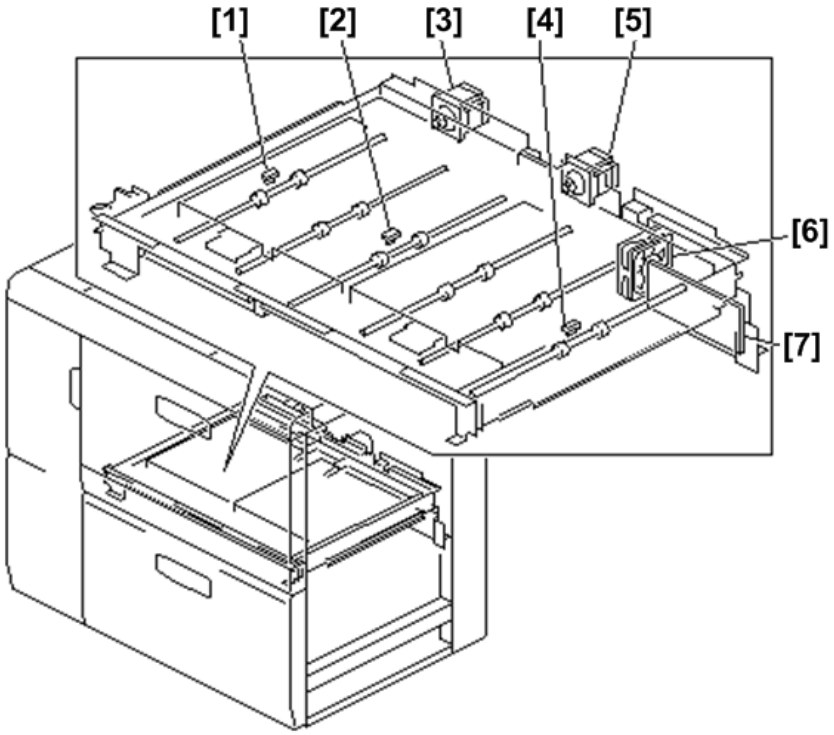
*1 This component is provided with the Multi Bypass Tray Connection Kit. When attaching the Multi Bypass Tray BY5020 to the machine, this component will be installed.

Others



No.	Name	No.	Name
1	Main Board	6	PSU Cooling Fan 2
2	Motor Control Board	7	PSU Cooling Fan 1
3	Tray Heater	8	PSU 1
4	PSU 3	9	PSU 2
5	Interlock Switch	10	AC Drive Board

Horizontal Transport Unit



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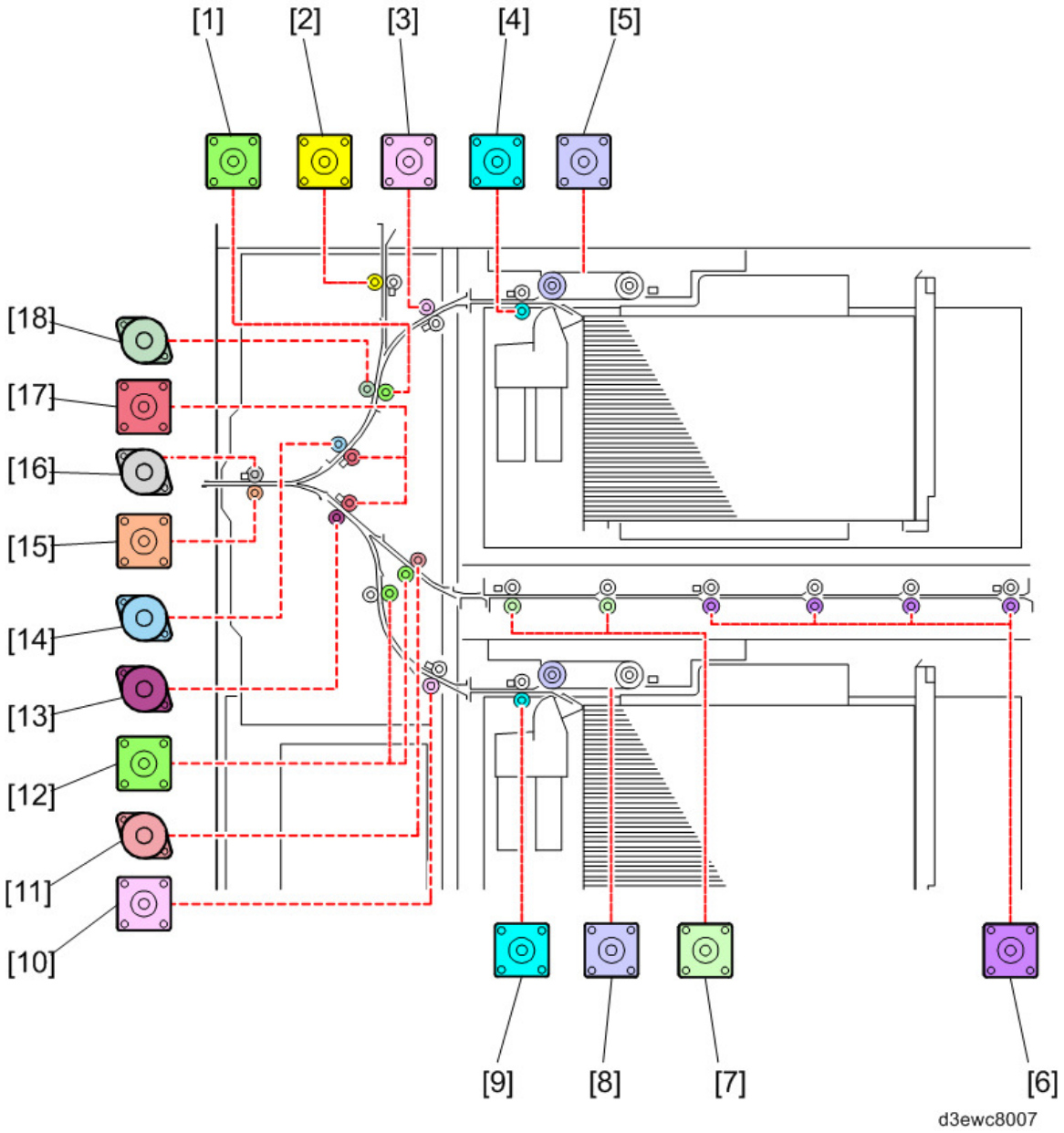
This unit is provided with the bridge unit. When attaching the bridge unit BU5010 to this machine, this component will be installed.

No.	Name	No.	Name
1	Horizontal Transport Exit Sensor	5	Horizontal Transport Entrance Motor
2	Horizontal Transport Middle Sensor	6	Cooling Fan
3	Horizontal Transport Exit Motor	7	PCB Motor Control Board
4	Horizontal Transport Entrance Sensor	-	-

Drive Layout

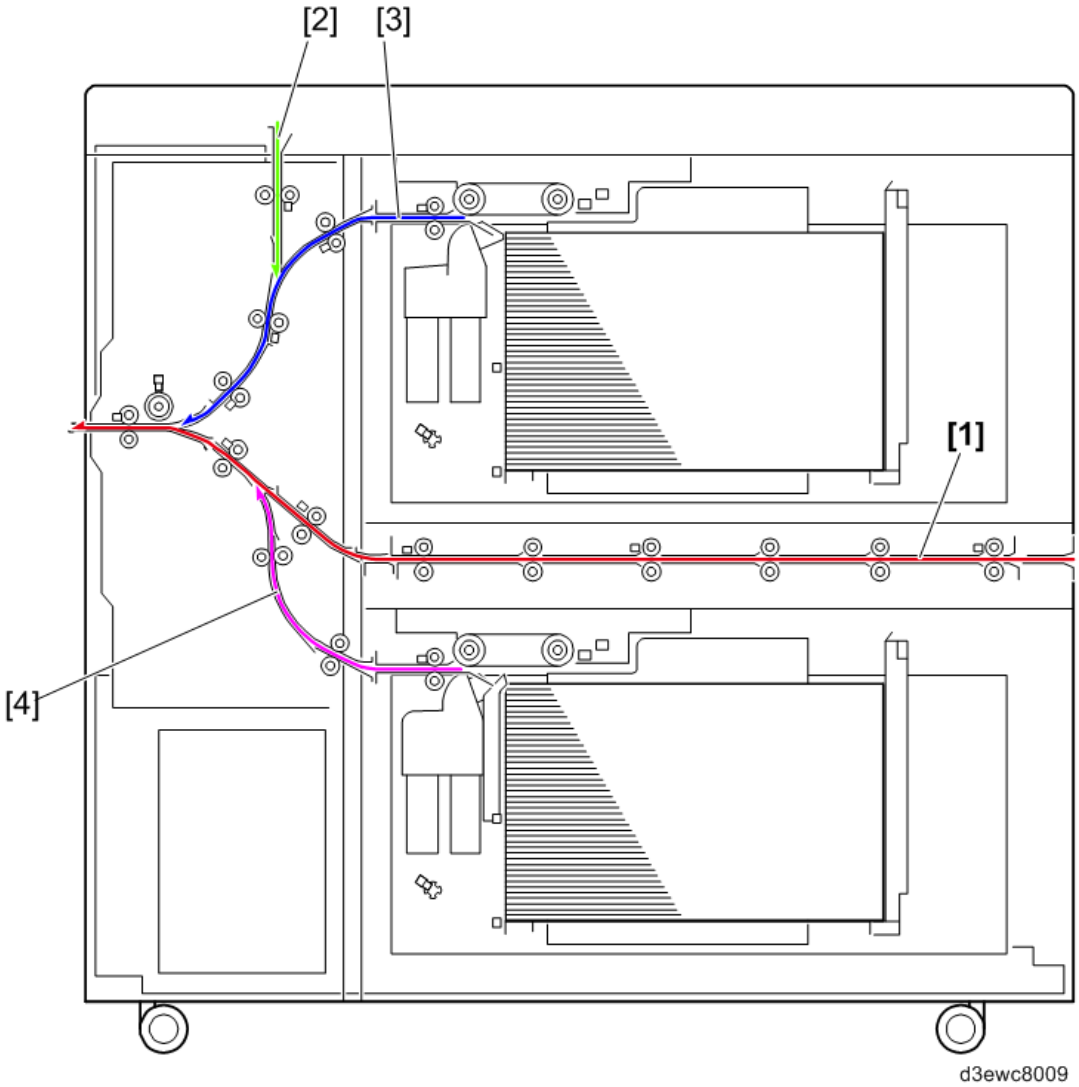


No.	Name	No.	Name
1	Tray 1 Vertical Transport Motor 2	10	Tray 2 Vertical Transport Motor 1
2	Bypass Transport Motor *1	11	Vertical Transport Entrance Contact Motor
3	Tray 1 Vertical Transport Motor 1	12	Tray 2 Vertical Transport Motor 2
4	Tray 1 Grip Motor	13	Tray 2 Vertical Transport Exit Contact Motor
5	Tray 1 Pickup Belt Motor	14	Tray 1 Vertical Transport Exit Contact Motor
6	Horizontal Transport Entrance Motor*2	15	LCIT Exit Motor
7	Horizontal Transport Exit Motor *2	16	LCIT Exit Roller Contact Motor
8	Tray 2 Pickup Belt Motor	17	Vertical Transport Exit Motor
9	Tray 2 Grip Motor	18	Tray 1 Vertical Transport Contact Motor

*1 This motor is provided with the bypass tray attachment kit. When attaching the Multi Bypass Tray BY5020 to this machine, this motor will be installed..

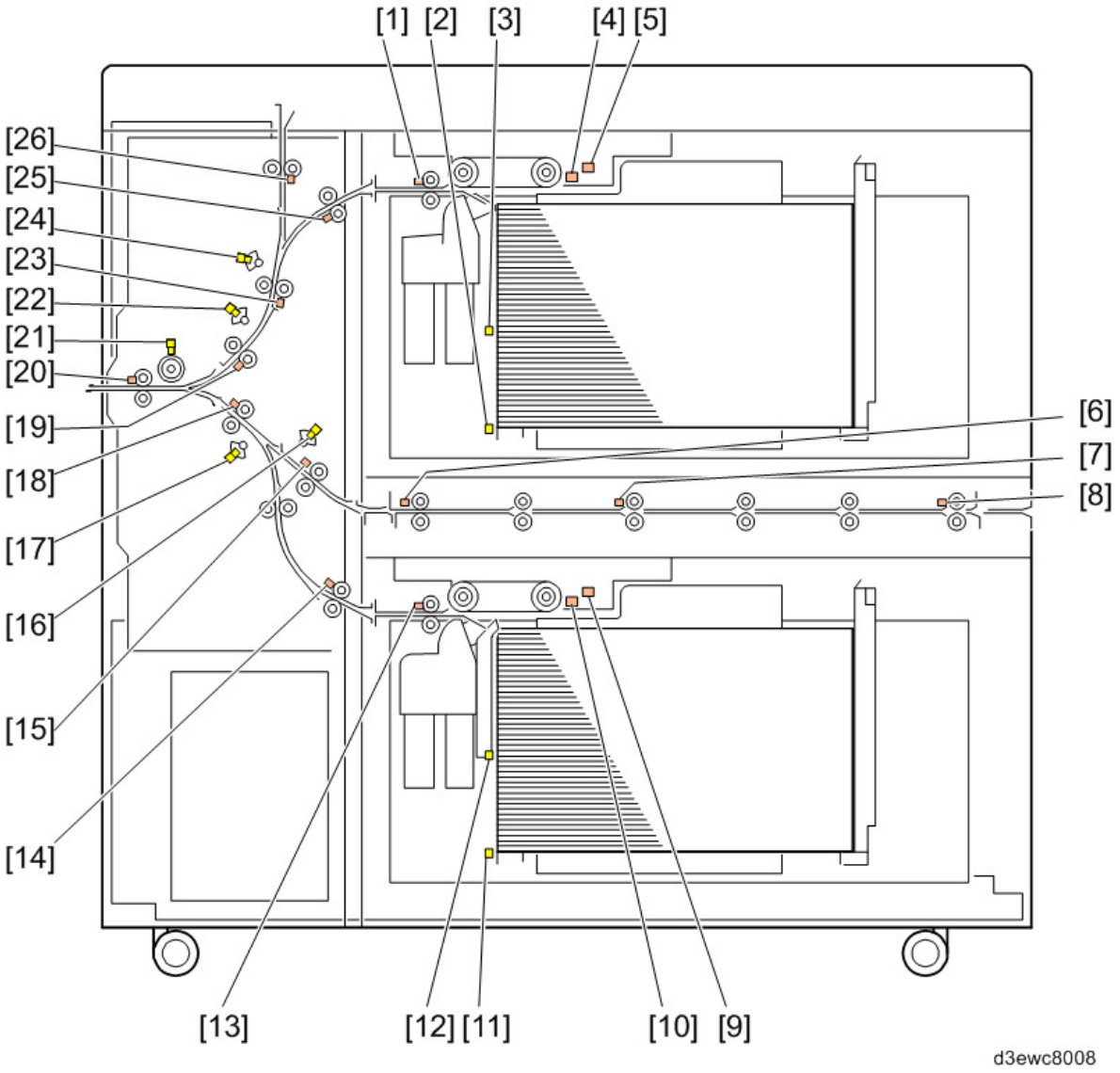
*2 These motors are provided with the bridge unit. When attaching the bridge unit BU5010 to this machine, they will be installed.

Paper Paths



No.	Name	No.	Name
1	Bridge A3 LCIT Transport	3	Tray 1 Feed Tray Transport
2	Bypass Tray Transport	4	Tray 2 Feed Tray Transport

Sensor Layout



No.	Name	No.	Name
1	Tray 1 Paper Feed Sensor	14	Tray 2 Transport Sensor
2	Tray 1 Paper Lower Limit Sensor	15	Vertical Transport Entrance Sensor
3	Tray 1 Paper Height Middle Sensor	16	Vertical Transport Entrance Contact Sensor
4	Tray 1 Paper End Sensor 2	17	Tray 2 Vertical Transport Exit Contact Sensor
5	Tray 1 Paper End Sensor 1	18	Tray 2 Vertical Transport Exit Sensor
6	Horizontal Transport Exit Sensor *1	19	Tray 1 Vertical Transport Exit Sensor
7	Horizontal Transport Middle Sensor *1	20	LCIT Exit Sensor
8	Horizontal Transport Entrance Sensor *1	21	LCIT Exit Roller Contact Sensor
9	Tray 2 Paper End Sensor 1	22	Tray 1 Vertical Transport Exit Contact Sensor
10	Tray 2 Paper End Sensor 2	23	Tray 1 Vertical Transport Sensor
11	Tray 2 Paper Lower Limit Sensor	24	Tray 1 Vertical Transport Contact Sensor

No.	Name	No.	Name
12	Tray 2 Paper Height Middle Sensor	25	Tray 1 Transport Sensor
13	Tray 2 Paper Feed Sensor	26	Bypass Vertical Transport Sensor

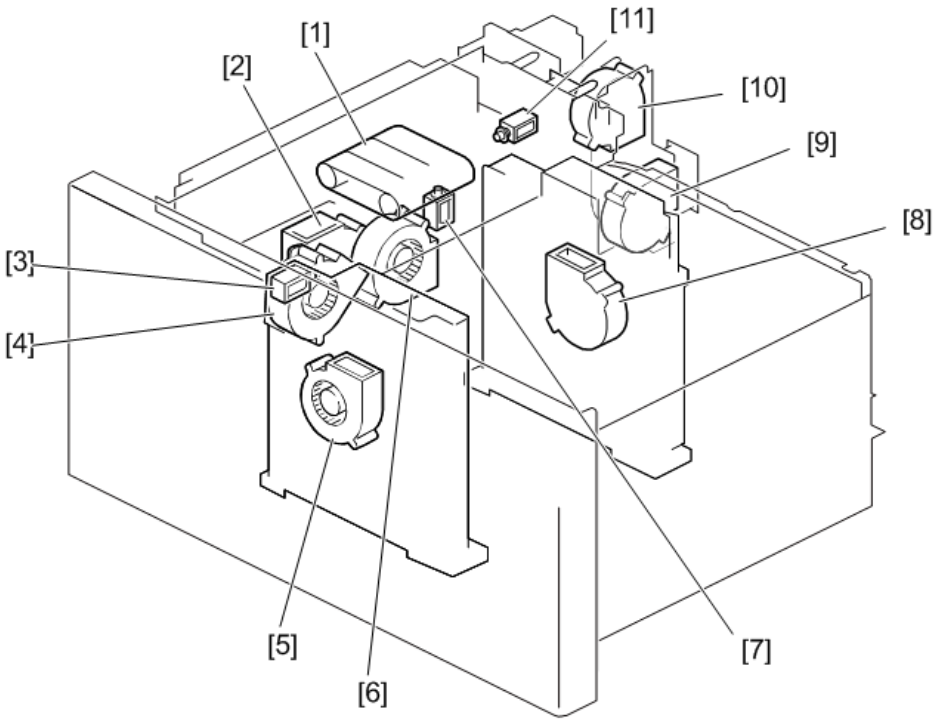
*1 These sensors are provided with the bridge unit. When attaching the bridge unit BU5010 to this machine, they will be installed.

Details

Air Paper Feed Mechanism

The air paper feed mechanism uses the air produced by the seven fans (float fan / separation fan / side fan (front/rear) / return fan / suction fan 1, 2) to handle and lift up and separate paper during the process of feeding paper.

The sheet separated is transported into the vertical transport unit while being sucked to the paper feed belt unit.



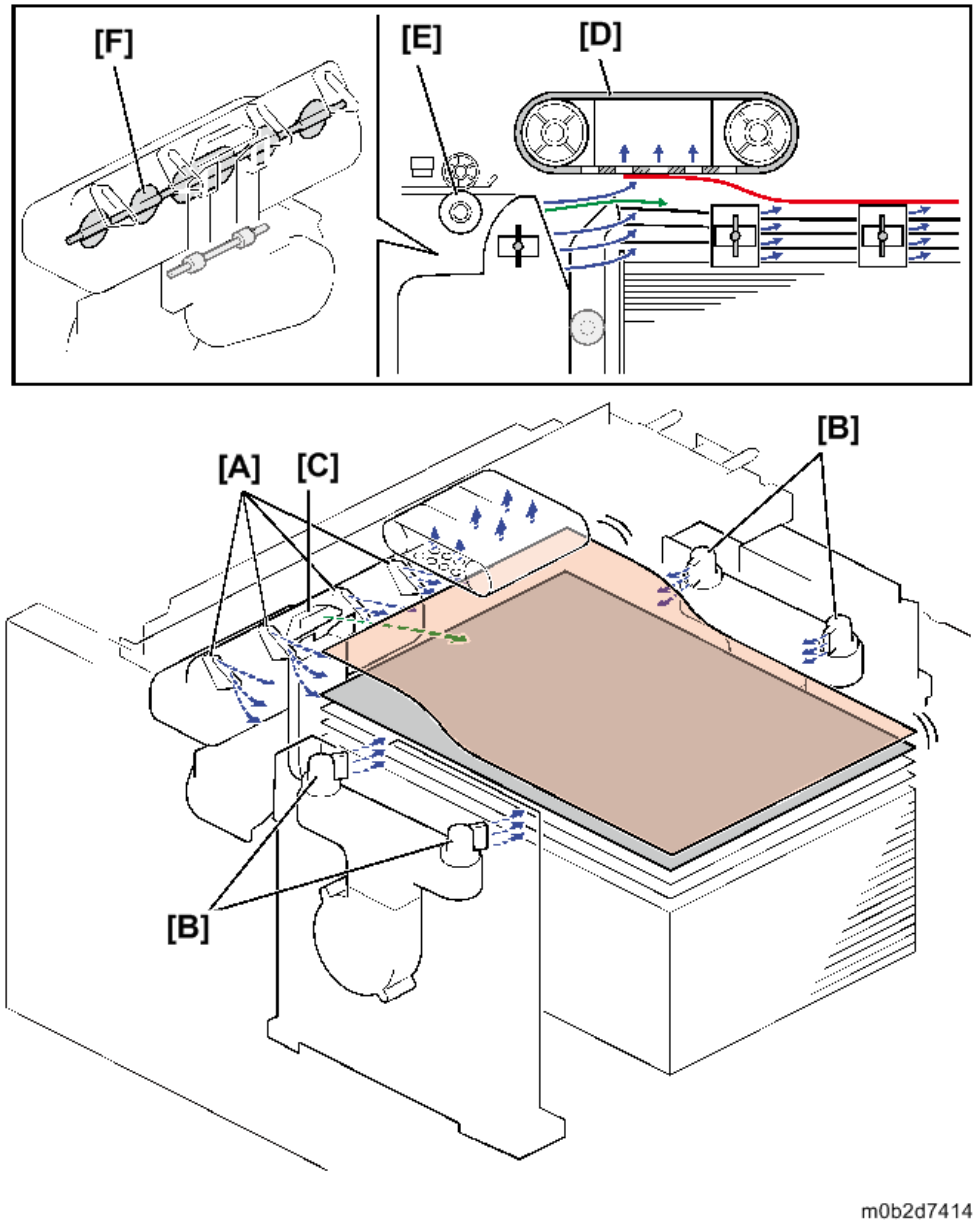
No.	Name	No.	Name
1	Paper Feed Belt Unit	7	Float Fan Shutter Solenoid
2	Float Fan	8	Side Fan (Rear)
3	Return Fan Shutter Solenoid	9	Suction Fan 2
4	Separation Fan	10	Suction Fan 1
5	Side Fan (Front)	11	Suction Fan Shutter Solenoid
6	Return Fan		

Separation, Transport

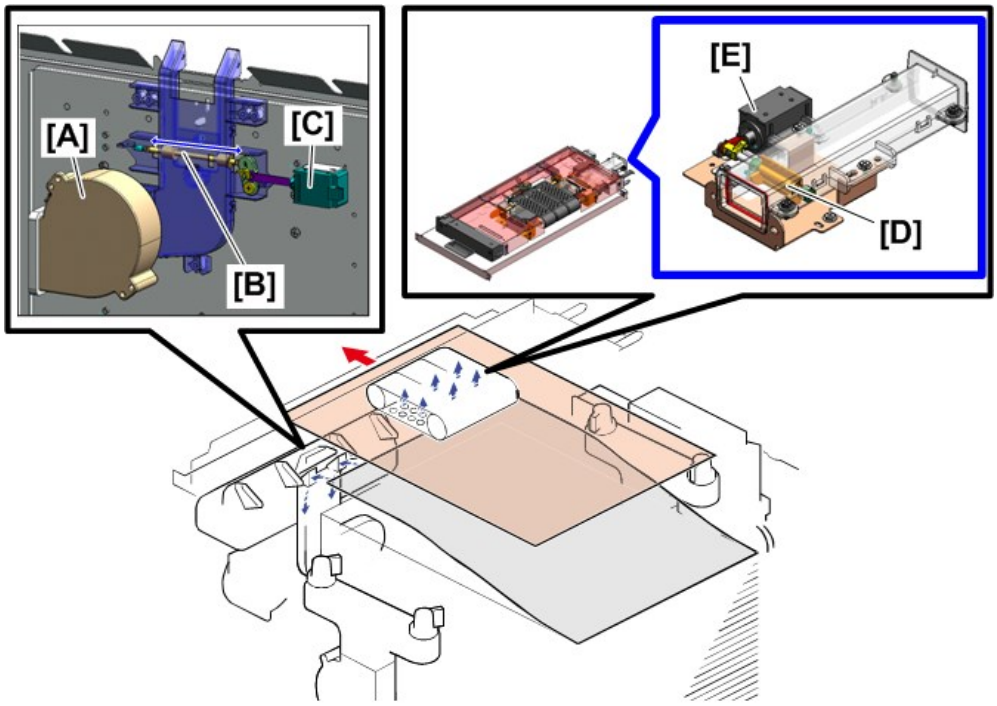
The air produced by the float fan floats up paper from the stack through the four float air nozzles [A] at the front of the paper feed tray. Also, air produced by the side fans blows through the side air nozzles [B] at the side fences. Then the air from the separator air nozzle [C] at the front of the paper feed tray separates the 1st sheet of paper from the 2nd sheet of paper.

The 1st sheet of paper separated is sucked against the paper feed belt [D], and is transferred to the

transport roller [E] by the paper feed belt [D], and then fed to the vertical transport unit.
Air blown from the separation fan and float fan is switched on/off by the shutter [F].
The air blown from the side air nozzles assist float and suction of the next sheet of paper. Also, it prevents double feed.



The return fan [A], return fan shutter [B], and return solenoid [C] near the feed nozzle improve the separation quality. Additionally, in the feed belt unit, the suction fan shutter [D] and suction fan shutter solenoid [E] prevent paper scratches during paper feed by the belt, by controlling the suction on the belt.



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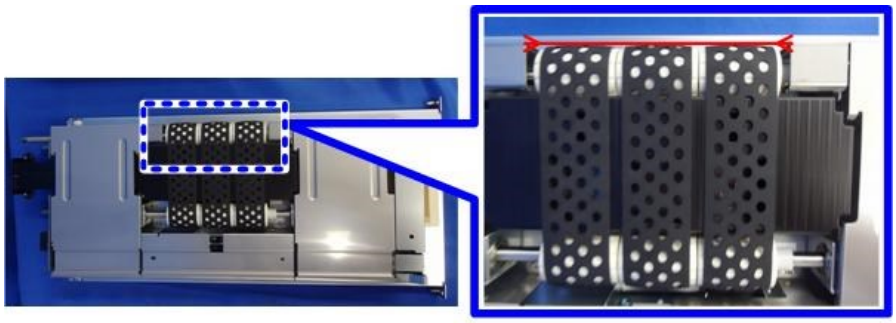
The three feed belts are installed at the same level. This improves the suction power and the feed quality for long paper.



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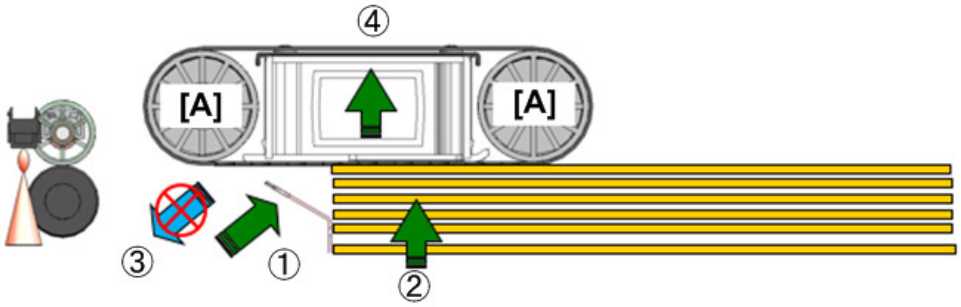
Fan Shutter Mechanism

Note

There is no shutters for the side fan, so air from the side fan (side air) always blows through while paper is transported.

1. Just before feed (first sheet of paper only)
   The float/separation fan, side fan, suction fan shutters open, but the return fan shutter does not.
   The feed belt [A] stops.

2.Detailed Descriptions



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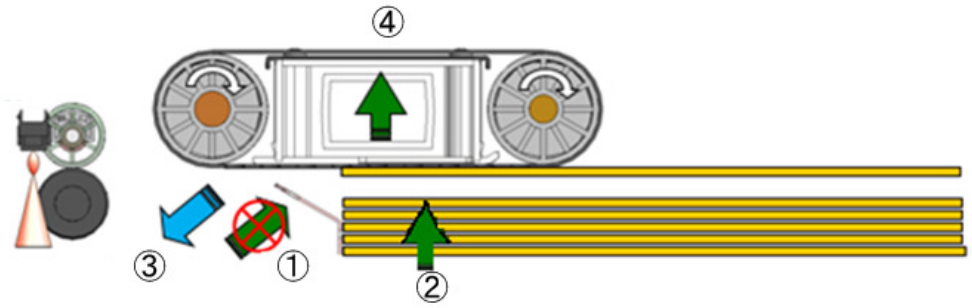
*Air	Shutter Name	Shutter State
1: Float/separation Air	Float/separation Fan Shutter	Open
2: Side Air	None	Open
3: Return Air	Return Fan Shutter	Closed
4: Suction Air	Suction Fan Shutter	Open

*The numbers in this column refer to the numbers in the diagram above.

2. Feed starts

After feed starts, the float/separation fan shutter and side fan shutter are closed, and the return fan shutter is open. The suction fan shutter is also open, to hold the top sheet of paper against the belt. After 60 msec of suction, the feed belt starts to move.



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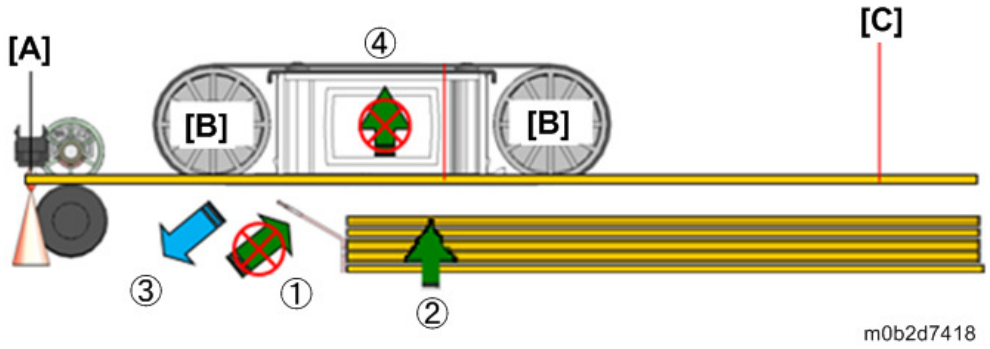
*Air	Shutter Name	Shutter State
1: Float/separation Air	Float/separation Fan Shutter	Closed
2: Side Air	None	Open
3: Return Air	Return Fan Shutter	Open
4: Suction Air	Suction Fan Shutter	Open

*The numbers in this column refer to the numbers in the diagram above.

3. Shutter open timing count starts

The feed sensor [A] turns on and the feed belt [B] stops. Then the suction fan shutter is closed.

When the feed sensor turns on, the count starts to determine when the trailing edge passes the float/separation fan shutter opening position [C].



*Air	Shutter Name	Shutter State
1: Float/separation Air	Float/separation Fan Shutter	Closed
2: Side Air	None	Open
3: Return Air	Return Fan Shutter	Open
4: Suction Air	Suction Fan Shutter	Closed

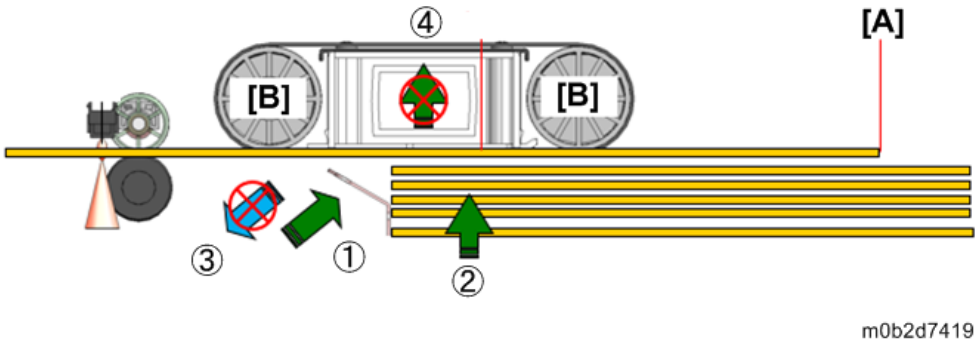
*The numbers in this column refer to the numbers in the diagram above.

4. Arrives at the float/separation fan shutter opening position

When the counter determines that the trailing edge arrives at the float/separation fan shutter opening position [A], the float/separation shutter opens to assist with the suction of the next sheet of paper.

The return fan shutter is closed so that it does not affect the air from the float fan.

The feed belt [B] stops.



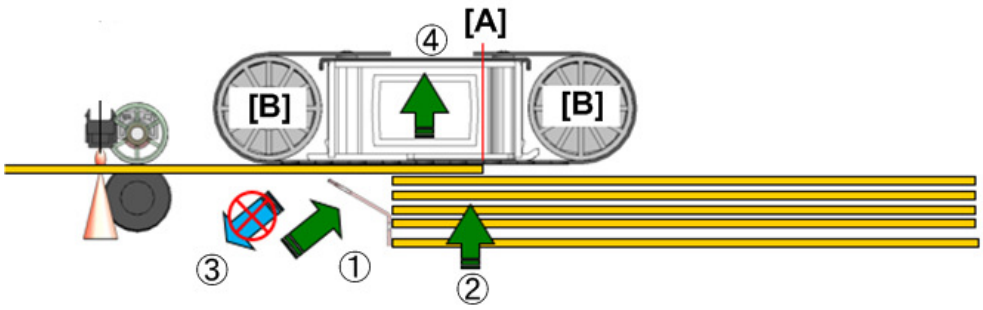
*Air	Shutter Name	Shutter State
1: Float/separation Air	Float/separation Fan Shutter	Open
2: Side Air	None	Open
3: Return Air	Return Fan Shutter	Closed
4: Suction Air	Suction Fan Shutter	Closed

*The numbers in this column refer to the numbers in the diagram above.

5. Arrives at the suction fan shutter opening position

When the trailing edge of the paper arrives at the suction fan shutter opening position [A], the suction fan shutter opens.

The feed belt [B] is stopped.



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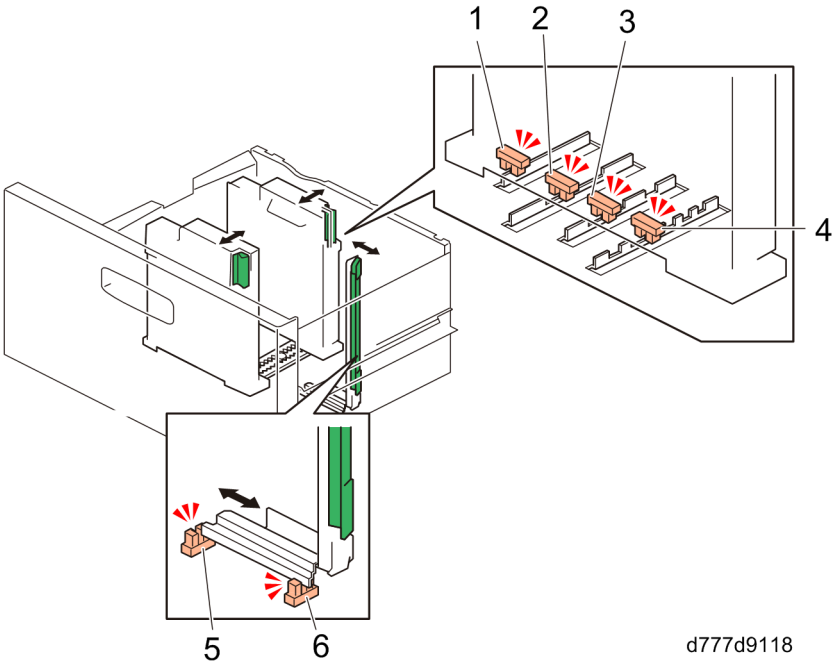
*Air	Shutter Name	Shutter State
1: Float/separation Air	Float/separation Fan Shutter	Open
2: Side Air	None	Open
3: Return Air	Return Fan Shutter	Closed
4: Suction Air	Suction Fan Shutter	Open

*The numbers in this column refer to the numbers in the diagram above.

Paper Size Detection

Each tray has a combination of paper width sensors (4 through beam sensors) and LCIT paper length sensors (2 through beam sensors).



No.	Name	No.	Name
1	Paper Size Sensor 1 (for detecting width)	4	Paper Size Sensor 4 (for detecting width)
2	Paper Size Sensor 2 (for detecting width)	5	LCIT Paper Length Sensor 1
3	Paper Size Sensor 3 (for detecting width)	6	LCIT Paper Length Sensor 2

Relationship between Sensor State & Paper Size

Paper size		Paper Width Sensor				LCIT Paper Length Sensor		Detection Method
		1	2	3	4	1	2	
13x19.2	SEF	1	1	1	1	0	0	●
F	LEF	1	1	1	1	1	N.C.	●
SRA3	SEF	1	1	1	0	0	0	●
SRA4	LEF	1	1	1	0	1	N.C.	●
12"×18"	SEF	1	1	0	1	0	0	●
A3	SEF	1	1	0	0	0	0	●
A4	LEF	1	1	0	0	1	N.C.	●
Double Letter	SEF	1	0	1	1	0	0	●
Letter	LEF	1	0	1	1	1	N.C.	●
B4	SEF	1	0	0	0	0	0	●
Exective	LEF	1	0	0	0	1	N.C.	○
B5	LEF	1	0	1	0	1	N.C.	●
Legal	SEF	1	0	1	1	0	0	●
A4	SEF	1	0	1	1	0	1	●
Letter	SEf	1	0	1	1	0	1	○
A5	LEF	1	0	1	1	1	N.C.	●

Paper size		Paper Width Sensor				LCIT Paper Length Sensor		Detection Method
		1	2	3	4	1	2	
Half Letter	LEF	1	0	1	1	1	N.C.	○
F	SEF	1	0	0	1	0	1	○
B5	SEF	1	0	0	0	0	1	●
A5	SEF	0	1	1	1	1	N.C.	●
Half Letter	SEF	0	1	1	1	1	N.C.	●
Postcard	SEF	0	1	0	1	1	N.C.	●

1 means sensor shielded, 0 means sensor transmitted and N.C means No Check (regardless of 1 or 0)

●: Can detect paper size automatically via the width and length detection sensors.

○: Size can be selected in the UP (SP) mode

Even if a paper size does not appear in the table above, all sizes of paper that can pass through the copier are considered ○.

The side fences can slide once their locks are released by squeezing their handles together on both sides.

The end fence can also slide once its lock is released by squeezing its handle.

⚠CAUTION

- Do not force the end fence when making it wider, as failing to squeeze the handle together may damage the fence.

Paper Tray Lift Mechanism

The pulley on the LCIT lift motor [A] at the back of the paper feed tray winds up the wires that lift the bottom plate [B]. The mechanism consists of 2 wires of different lengths at the front and rear of the tray, which work together to keep the bottom plate level as they lift it. The short wire lifts the front of the bottom plate, while the long wire lifts the rear.

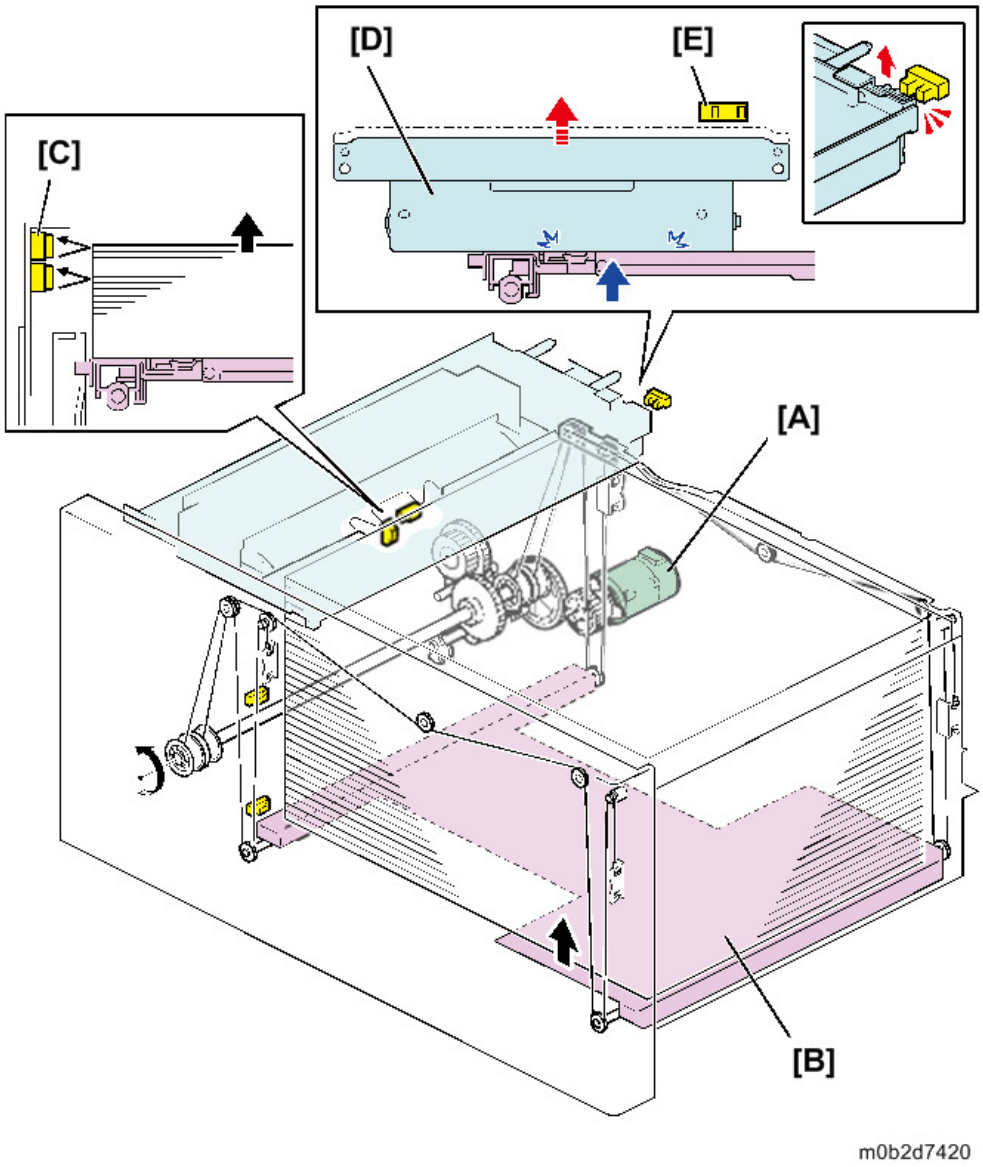
The motor lifts the bottom plate until the paper upper limit sensors [C] detect the surface of the paper, turning the motor off and stopping the movement of the plate. There are two paper upper limit sensors and which sensor is used to detect the paper is determined at the timing of a job start.

Paper upper limit sensor 2 on the lower side detects the paper by default. When receiving the start job of the paper feeding, it is switched to the sensor that is suitable to the paper thickness by the acquisition of the paper information.

If the surface of the paper drops during printing, it turns the top sensor off, which turns the LCIT lift motor and lifts the paper. When the paper feed tray is pulled out, the bottom plate drops down by its own weight.

If the paper feed belt unit [D] (located at the ceiling of the bottom plate) is lifted up too much, the tray upper limit sensor [E] detects it and generates SC503-015/504-015 “bottom plate over lift”, and stops the bottom plate at the limit. (If more than two of the units are docked, SC505-115/506-015, SC507-015/508-015)

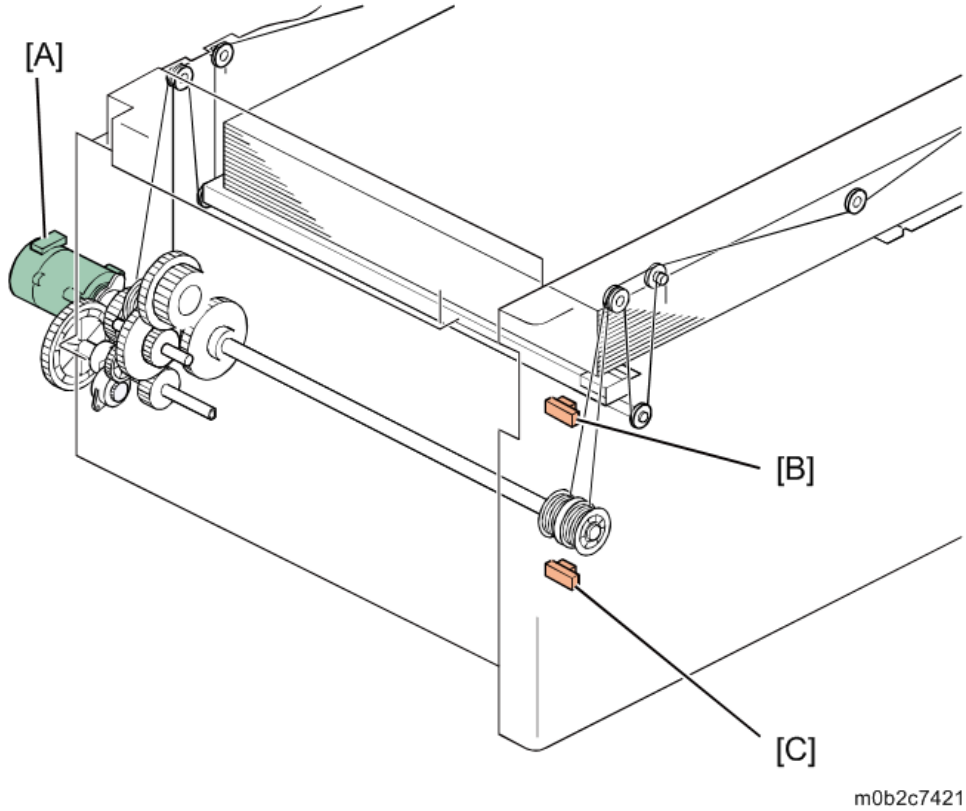
If this happens, pull out the paper feed tray to release it.



Remaining Paper Detection

The paper remaining is detected by counting pulses of the LCIT lift motor [A], and is shown in a four-stage display on the operation panel.

When the bottom plate is lower than the paper height middle sensor [B], the remaining indicator is affected by the pulse count that starts when the plate passes the lower limit sensor [C]. When the stack of paper is finished, the bottom plate moves up and passes the paper height middle sensor, and the indicator is affected by the pulse count that is reset and restarts when the plate passes the paper height middle sensor.



Relationship between Sensor State and Paper Remaining

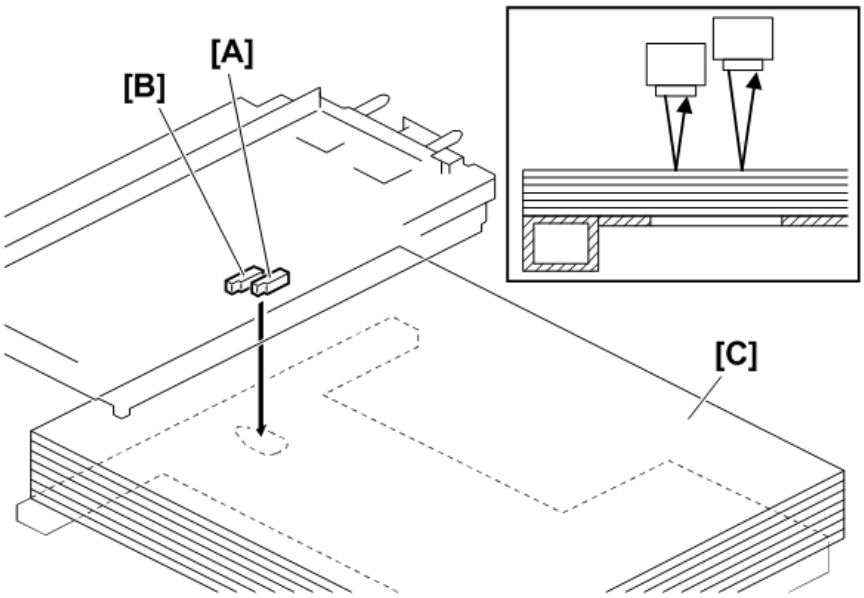
- When the upper limit is detected and the lower limit sensor detects, the output pulses of the LCIT lift motor are not counted and the remaining amount is determined as 100 %.
- When the upper limit is detected and the paper height middle sensor detects, the output pulses of the LCIT lift motor are not counted and the remaining amount is determined as 50 %.
- When the bottom plate passes the lower limit sensor, the pulse count for the LCIT lift motor starts.
- When the paper height middle sensor detects, the pulse count for the LCIT lift motor resets. Then, when the bottom plate passes the lower limit sensor, the count starts.
- When paper remaining is 5 % or less, it is determined as 5 % until the paper end.
- When the paper height middle sensor detects, the remaining amount is determined as 50 % regardless of the state of the lower limit sensor and the output pulses of the LCIT lift motor.
- The pulse count is cleared when no tray is in the LCIT.

Amount of Paper Remaining (%)	Paper Stack Height [mm]	LCIT Lift Motor Pulse Count		Lower Limit Sensor	Paper Height Middle Sensor	Paper End Sensor	Amount of Paper	Displays on the operation panel
		Lower-limit-passing to middle-entering	Middle-passing to paper end					
100	247.0	-	-	Detected	Not detected	Not detected	2470	
100	244.0	0	-	Not detected (Passing)	Not detected	Not detected	2440	
95	231.8	1034	-	Not detected	Not detected	Not detected	2318	
90	219.6	2028	-	Not detected	Not detected	Not detected	2196	
85	207.4	3021	-	Not detected	Not detected	Not detected	2074	4 bars
80	195.2	4014	-	Not detected	Not detected	Not detected	1952	
75	183.0	5007	-	Not detected	Not detected	Not detected	1830	
70	170.8	6000	-	Not detected	Not detected	Not detected	1708	
65	158.6	6993	-	Not detected	Not detected	Not detected	1586	3 bars
60	146.4	7985	-	Not detected	Not detected	Not detected	1464	
(Middle-Entering)	136.0	-	-	Not detected	Detected	Not detected	1360	
(50)	122.0	-	-	Not detected	Detected	Not detected	1220	
(Middle-Passing)	119.0	-	0	Not detected	Not detected (Passing)	Not detected	1190	2 bars
45	109.8	-	748	Not detected	Not detected	Not detected	1098	

Amount of Paper Remaining (%)	Paper Stack Height [mm]	LCIT Lift Motor Pulse Count		Lower Limit Sensor	Paper Height Middle Sensor	Paper End Sensor	Amount of Paper	Displays on the operation panel
		Lower-limit-passing to middle-entering	Middle-passing to paper end					
40	97.6	-	1739	Not detected	Not detected	Not detected	976	
35	85.4	-	2730	Not detected	Not detected	Not detected	854	
30	73.2	-	3721	Not detected	Not detected	Not detected	732	
25	61.0	-	4710	Not detected	Not detected	Not detected	610	1 bar
20	48.8	-	5697	Not detected	Not detected	Not detected	488	
15	36.6	-	6682	Not detected	Not detected	Not detected	366	
10	24.4	-	7661	Not detected	Not detected	Not detected	244	
5	12.2	-	8630	Not detected	Not detected	Not detected	122	
0	0.0	-	9649	Not detected	Not detected	Detected	0	End

Paper End Detection

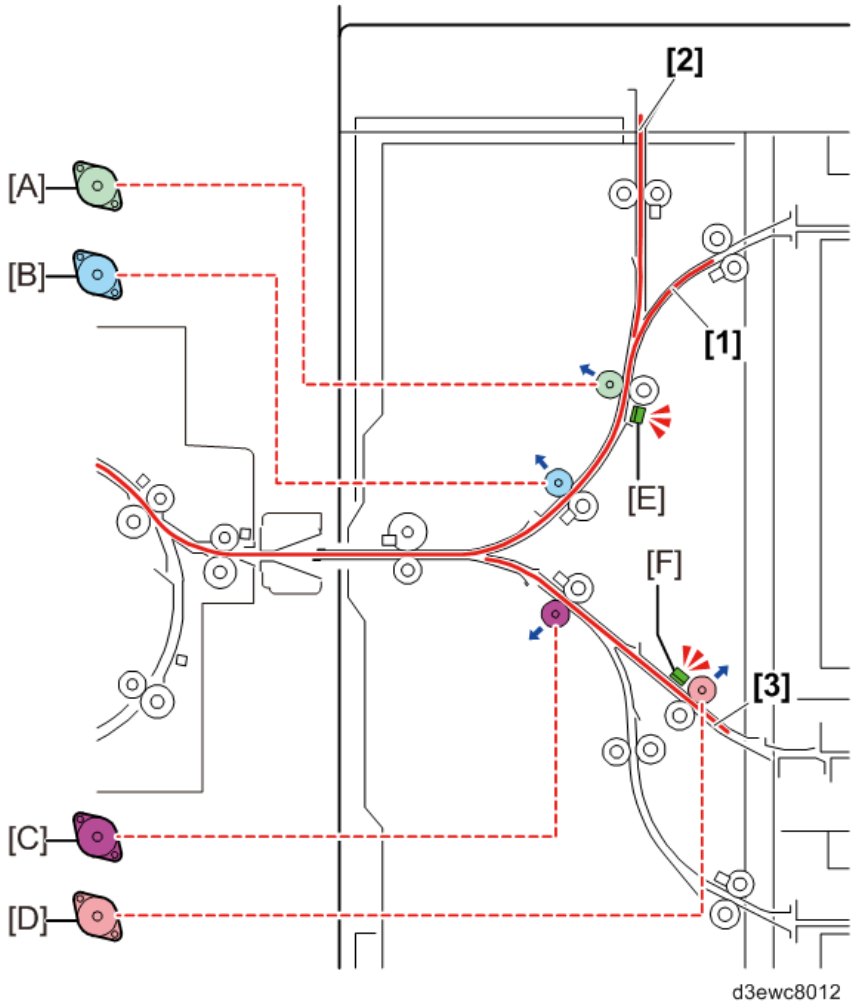
In the paper feed belt unit, paper end sensor 1 [A] and paper end sensor 2 [B] are at different levels. They monitor the surface of the paper [C].
When either of the sensors determines the end of paper, the LCIT lift motor reverses and lowers the bottom plate.



Exit Roller Contact Mechanism

This LCIT unit has a new roller contact mechanism (pair of four rollers contacts/separates) to release rollers that grip the trailing edge of paper when the SWIFT unit corrects the position of the paper in the main machine (Pro C9200/C9210 models only).

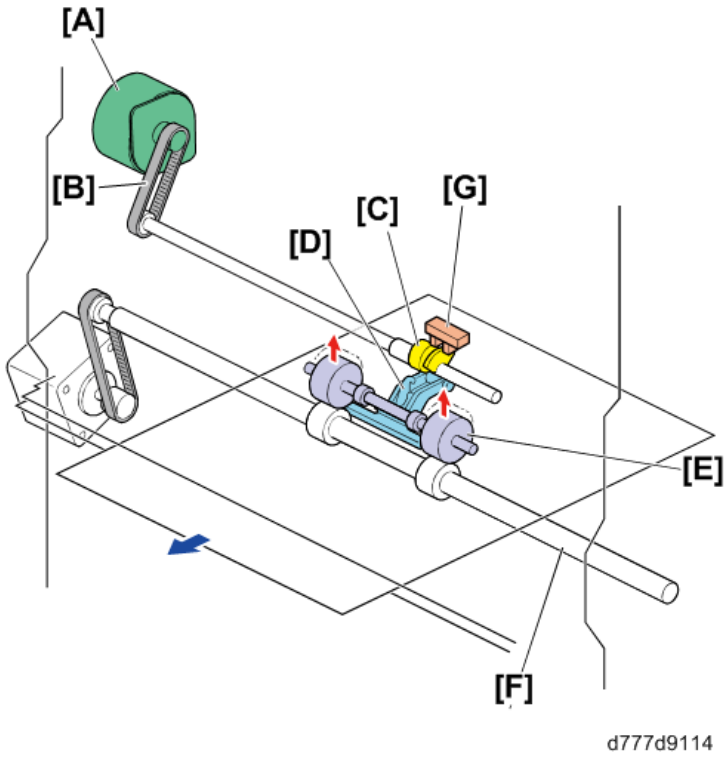
The long paper contact motors 1 to 4 ([A] - [D]) are for vertical transport (for three paths [1] [2] [3]). The three paths are related to Multi Bypass Attachment Kit for Vacuum Feed LCIT Type S9 [1], Multi Bypass Banner Sheet Tray Type S9 [2], Bridge A3 LCIT [3] respectively.
Additionally, the Tray 1 vertical transport sensor [E] and vertical transport entrance sensor [F] are newly added to detect the transport of long paper.
When attached to Pro C7200/C7210 series models, this roller contact mechanism for long paper does not function.



The contact operation of the rollers is the same way of the LCIT exit roller contact mechanism that is previously employed.

As an example, the contact mechanism of the LCIT exit rollers is explained as follows.

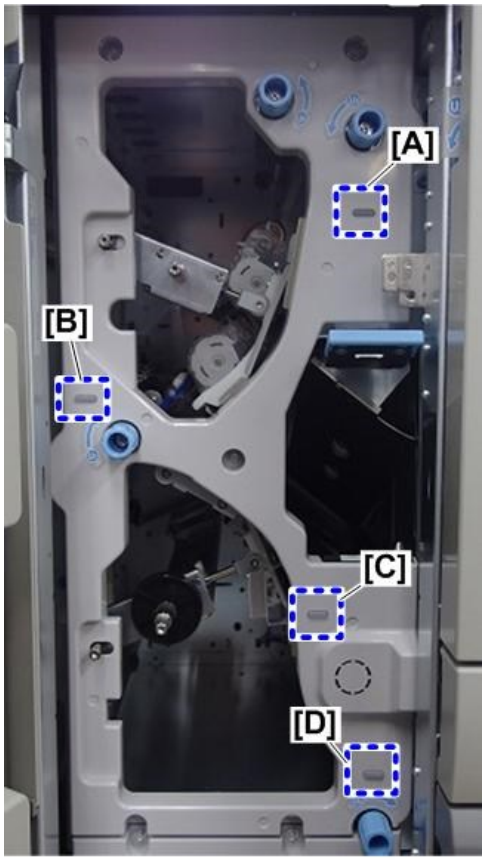
When the LCIT exit roller contact motor [A] is ON, it turns the cam [C] on the driveshaft via the belt [B]. The roller contact arm [D] moves up/down in conjunction with the cam, and this mechanism separates the slave exit roller [E] from the drive exit roller [F]. The LCIT exit roller contact sensor [G] detects whether or not they are in contact.



Jam LEDs

The vertical transport has jam LEDs to indicate where jams occur, which prevents jammed paper from being torn when you handle it.

Jam LED Layout



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No.	Name	No.	Name
[A]	Tray 1 Vertical Transport Lever LED	[C]	Horizontal Transport Lever LED
[B]	LCIT Exit Knob LED	[D]	Tray 2 Vertical Transport Lever LED

Jam Sensors and Jam LEDs

- When a jam (including a jam detected during initialization) occurs, a jam sensor detects it, and then the corresponding LED blinks.
- Jam LEDs blink when the front door is open in a jam condition.
- When multiple LEDs blink to indicate jam locations, they blink at the same time.
- Jam sensors always monitor even when you are handling a jam (because the sheet following a jammed sheet moves when you rotate a jam removal knob).
- The LED stops blinking two seconds after a jam sensor switches from on to off. If the sensor turns on again within the two seconds, the LED keeps blinking.
- All of the LEDs turn off when the front door is closed. But if a jam is detected during initialization, a jam LED blinks when the front door opens.

Jam Sensor	Jam LED
Feed 1 Sensor	Vertical Transport 1 LED

Jam Sensor	Jam LED
Transport 1 Sensor	
Feed 2 Sensor	Vertical Transport 2 LED
Transport 2 Sensor	
Bypass Vertical Transport Sensor	-
Vertical Transport 1 Sensor	
Vertical Transport 1 Exit Sensor	
Vertical Transport 2 Exit Sensor	
LCIT Exit Sensor	LCIT Exit LED
Horizontal Transport Entrance Sensor	-
Horizontal Transport Middle Sensor	-
Horizontal Transport Exit Sensor	Horizontal Transport LED
Vertical Transport Entrance Sensor	-

Anti-condensation

An optional tray heater can be installed under paper feed tray 2.

It is not operated by the ON/OFF switch, but is always ON when the AC power of the vacuum feed LCIT is plugged in. If you wish to turn the heater OFF, the heater's relay connector [A] must be disconnected.